

Prof. AJAYAN VINU, FRSC, FFMAS

Professor and ARC Future Fellow

Australian Institute for Bioengineering and Nanotechnology
The University of Queensland, 75 Corner College and Cooper Roads
Brisbane, Queensland 4072, Australia

Tel: +61-7-3346-4122

Mob: +61-419-418-862

Fax: +61-7-3346-3973

Email: a.vinu@uq.edu.au

Website: <http://www.aibn.uq.edu.au/prof-ajayan-vinu>



Academic Highlights and Work Experience

- 2011 to till date** **Full Professor and ARC Professorial Level (FT3) Future Fellow**, Australian Institute for Bioengineering and Nanotechnology, The University of Queensland, Brisbane, Australia.
- 2011 to 2011** **Alexander Humboldt Wilhelm Friedrich Bessel Award Fellow**, Max Planck Institute, Potsdam, Germany
- 2011 to 2011** **Visiting Professor**, Fudan University, China
- 2009 to 2011** **Research Director**, NIMS-India Materials Research Center, World Premier International Research Center, National Institute for Materials Science, Japan.
- 2007 to 2011** **Senior Scientist**, International Center for Materials Nanoarchitectonics, World Premier International Research Center, National Institute for Materials Science, Japan.
- 2006 to 2007** **Senior Scientist**, Fuel Cell Materials Center, National Institute of Materials Science, Japan
- 2004 to 2006** **International Young Scientist Fellow**, National Institute of Materials Science, Japan
- 2003 to 2004:** **Post doctoral Researcher**, Technical University of Kaiserslautern, Kaiserslautern, Germany.
- 2000 to 2003:** **Doctor of Philosophy** in Chemistry (June 2003); Title: 'Pore size engineering and characterization of modified SBA-1, SBA-15, MCM-41 and mesoporous carbon molecular sieves: A study of protein adsorption' Anna University, Chennai, India (in collaboration with **University of Kaiserslautern, Germany** under the exchange programme)
- 2001 to 2003:** **Research Scientist**, Technical University of Kaiserslautern, Kaiserslautern, Germany.
- 1999 to 2001:** **Junior Research Fellow**, BRNS project, Anna University, India
- 1998 to 1999** **Honors in Diploma of Computer Applications**, Computer Software Centre, Chennai, India
- 1996 to 1998:** **Master of Science** in General Chemistry from Manonmaniam Sundarnar University, Tirunelveli, India
- 1993 to 1996:** **Bachelor of Science** in Chemistry from Manonmaniam Sundarnar University, Tirunelveli, India

Awards/Fellowships

My outstanding contributions in the field of nanoporous materials are well recognized by chemical and materials research societies from all over the world. The details of the some of these awards are given below:

- Scopus Young Researcher Award 2014 for physical sciences by ELSEVIER

- Senior JSPS Invitation Fellowship Award for the year 2014 by the Japan Society for the Promotion of Science
- Fellow of Royal Society of Chemistry (FRSC)
- Foreign Fellow of Maharashtra Academy of Science, India (FFMAS)
- IUMRS – MRS Singapore Young Researcher Award 2014 Finalist
- Wilhelm Friedrich Bessel Award for the year 2010 by the Alexander von Humboldt foundation.
- Australian Future Fellowship (FF) Award (Top Level) for the year 2010 by the Australian Research Council (The youngest person who received the top level FF from Australia in the field of Nanomaterials).
- Indian Society of Chemists and Biologists Award for Excellence, 2010.
- Catalysis Society of India Award for the year 2010 by the Catalysis Society of India.
- Chemical Society of Japan Award for Young Chemists for the year 2008 by Chemical Society of Japan (The first Indian and the first foreigner who received this award from CSJ, Japan)
- Khwarizmi International Award Iranian Top Science Prize for the year 2008 for the Applied research in nanotechnology, “Laureate of KIA” by UNESCO, UNHO, IROST and WIPO. The award was given by the H.E. the president of Iran. Prof. CNR Rao has also been given this award for the year 2008.
- Asian Excellent Young Researcher Lectureship Award, 2008, by the president of Chemical Society of Japan (Prof. Nakanishi, President of CSJ, Japan).
- ICYS Fellowship award, which is the world most prestigious fellowship by the National Institute for Materials Science, Tsukuba, Japan (2004-2006)
- Best paper award from STAM journal for the year 2010.
- Junior Research Fellowship (JRF, Department of Atomic Energy, India) to pursue Doctoral studies at Anna University, India

Honors

In response to my research performance and international standing, many top institutions have honored me with adjunct professor or director appointments. I have been also a committee member for reviews of several universities around the world and some of them are listed here:

- Editor-in-Chief, Advanced Porous Materials
- Editor, Science of Advanced Materials (Since 2015)
- Editor/Editorial Board Member, Scientific Reports, Nature Publishing Journal (Since 2013)
- Australian Editor, Journal of Nanoscience and Nanotechnology (Since 2015)
- Associate Editor, Journal of Nanoscience and Nanotechnology (2010-2015)
- Associate Editor, Nanosystems in Engineering and Medicine (ISSN 2167-5813)
- Editor/Editorial Board Member, Journal of Nanomaterials
- NIMS Ambassador to India – 2006 to 2010.
- Adjunct Professor, Yonsei University, South Koea
- Adjunct Professor, Kyungpook National University, South Koea
- Adjunct Professor, EWHA Womans University, South Korea
- Adjunct Professor, Anna University, India
- Adjunct Associate Professor (2007 to till date), Hokkaido University, Hokkaido, Japan
- Adjunct Principal Researcher (2007 to till date), Korean Research Institute of Chemical Technology, Daejeon, South Korea.
- Guest Professor of Jilin University
- Visiting Professor of Sichuan University and Fudan University, China
- PhD thesis examiner of IIT, Kharagpur, India
- PhD thesis examiner of University of Western Australia, Australia.
- PhD thesis examiner of University of Wollongong, Australia.
- Thesis examiner of Cairo University, Egypt
- PhD thesis examiner of University of Pune, India
- PhD thesis examiner of Acharya Nagarjuna University, India

- PhD thesis examiner of Visva-Bharati, Santiniketan, India
- PhD thesis examiner of Anna University, India
- PhD thesis examiner of St. Joseph's college Trichy.
- PhD thesis examiner of Bharathidasn University, Trichy.
- International Selection Committee Member for Future Fellowship, ARC, Australia.
- International Project Advisory Board member of ICBIN, Yonsei University, South Korea
- International Project Advisory Board member of Kent State University, USA.
- Evaluation committee member of staff promotion of King Saud University 2014
- Evaluation committee member of staff promotion of Kuwait University 2014
- Evaluation committee member of staff promotion of University of Jordan 2014
- Project review committee member of Czech Science Foundation
- Project review committee member of King Fahd University of Petroleum & Minerals, Saudi Arabia
- Project review committee member of Chili Science and Technology, Chill
- Selection Committee Member of Shanti Swarup Bhatnagar Prize of India, which is the Top Science Prize in India
- Poster award selection committee member, APEnergy 2014.
- Poster award selection committee member, AIBN conference, 2011.
- Poster award selection committee member, International conference on advanced materials 2008, BARC, Mumbai
- Poster award (Young Scientist award) selection committee member, IUMRS-2008, Nagoya, Japan
- Gave several invited lectures in the well reputed universities and national institutes in America, Australia, Canada, Germany, Netherland, Belgium, Italy, South Korea, South Africa, China, Czech Republic, India, Iran, Saudi Arabia, and Japan.
- Given a chance to meet and interact with the Nobel Laureates on a personal basis in the 52nd Nobel Laureates meeting held at Lindau, Germany, July 2002
- Selected as Excellent P & G Intern Fellow for the European Research Programme 2002, held at Schwalbach Technical Centre, Procter & Gamble, Germany (One among the total of 12 students were selected from all over the Europe)
- Visited as a Guest Scientist at the National Chemical Laboratory, Pune, November, 2002, India

Publication Records: papers, patents and book chapters

Papers, Citation and Awards

My contribution in the field of nanoporous materials is clearly reflected by my international ranking by Science Watch as one of the top 15 researchers in the field. During the last 10 years, I have carried out high quality research and made a significant contribution in the field of nanoporous materials and their applications in fuel cells, adsorption, separation, and catalysis. I have introduced a new field of research on nanoporous nitrides and developed novel methods for making new nanoporous materials with different textural parameters and multiple functions.

This research has led to 295 papers in high impact factor journals with more than 10,500 citations and a H-index of 55 and 19 patents. My research has been published in top journals like Angew. Chemie, Nano Letters, J. Am. Chem. Soc, Adv. Mater, Adv. Funct. Mater, Chem. Eur. J, Chem. Mater, etc. with an average of 750 citations per year. At least 30 of my papers have been cited more than 100 times (7 papers have been cited more than 200 times) and 50 papers have been cited more than 50



times. I have also been invited to write several chapters by respected publishers including Wiley, Elsevier and American Scientific. This numerical data reveals the high quality of my research, innovative ideas and creativity.

Editors and Reviewers

I am Editor-in-Chief of Advanced Porous Materials. I was also recently appointed as an Editor of Science of Advanced Materials. I am also an Australian Editor of the Journal of Nanoscience and Nanotechnology and an Associate Editor of of Nanosystems in Engineering and Medicine (ISSN 2167-5813). I am also the member of American, Royal, and Japan chemical societies. I am a reviewer for more than 70 top journals in the fields of Chemistry and Materials Science including Angew. Chemie, JACS, Chem. Eur. J, Adv. Mater., Adv. Funct. Mater., and Chem. Mater. and get review requests for more than 120 papers per year.

Editorial Board Member

- Scientific Reports, a journal of Nature Publishing Group (IF > 5).
- Chemical Record, A Wiley journal (IF > 5)
- Heliyon, an Elsevier Journal
- Journal of Nano science and Nanotechnology,
- Journal of Nanomaterials
- Advanced Science Letters
- Current Science
- Open Materials Science and Open Biomaterials Journal

Advisee Awards

Travel Grant Award, Mr. Kripal Lakhi, 4th International Workshop and Seminar on Green Energy Conversion, August 26-August 27, 2015, Japan

Travel Grand Award, Miss. Mercy Benzigar, 4th International Workshop and Seminar on Green Energy Conversion, August 26-August 27, 2015, Japan

Travel Grant Award, Mr. Satalin Joseph, 3rd International Workshop on Green Energy Conversion, August 24-27, 2014, Japan

Best Poster Award, Miss. Mercy Benzigar, 3rd International Workshop on Green Energy Conversion, August 24-27, 2014, Japan

Travel Grant Award, Mr. Kripal Lakhi, 2nd International Workshop and Seminar on Green Energy Conversion, September 2-4, 2013, The University of Yamanashi, Japan

Best Poster Award, Mr. Geoffrey Lawrence, 2nd International Workshop and Seminar on Green Energy Conversion, September 2-4, 2013, The University of Yamanashi, Japan

Travel Grant Award, Mr. Kripal Lakhi, 2nd International Workshop and Seminar on Green Energy Conversion, September 2-4, 2013, The University of Yamanashi, Japan

Best Poster Award, Mr. Geoffrey Lawrence, 2nd International Workshop and Seminar on Green Energy Conversion, September 2-4, 2013, The University of Yamanashi, Japan

Best Oral Presentation Award, Mr. Geoffrey Lawrence, 21st International Conference on Materials and Technology, Slovenia, November 13-15, 2013.

Best Poster Award Finalist, Dr. C. Anand, International Conference on Emerging Advanced Nanomaterials, October 22-25th 2012.

Encouragement of Research in Materials Science Award, Dr. Pavuluri Srinivasu and Dr. Ajayan Vinu, IUMRS International Conference in Asia 2008.

Teaching and Courses Taught

Graduate Courses at Hokkaido University

Advanced Nanostructured Materials (Year 2009 and 2010)

Characterization of Nanomaterials (Year 2009 and 2010)

International Advisory Board Member

- International Advisory Board Member, the International Conference on Nanoscience and Nanotechnology (ICONN-2015), 4-6th Feb 2015.
- International Advisory Board Member of NANO-7, June 22-25, 2014, Niagara falls, Canada.
- International conference on functional materials, Feb. 5-7, 2014, IIT Kharagpur, India
- International Mesostructured Materials Symposium, Awaji Island, Japan May 20-24, 2013.
- International Conference on Advanced Nano Materials (ANM 2012), IIT Chennai, Feb 29 to March 2nd, 2012.
- ICPMMDF CONFERENCE, Shivaji University, India on 17-19th 2012.
- The Sixth International Symposium on NANOPOROUS MATERIALS (NANO-6), Banff, AB, Canada on August 21-24, 2011
- 15th ISCBC-2011, Saurashtra University, Rajkot, India, Feb 5 to 7, 2011.
- International Workshop & Symposium on the Synthesis and Characterisation of Glass/Glass-Ceramics (IWSSCGGC-2010), Pune, India, July 7th 10th 2010.
- 3rd International Conference on Nanostructures, Kish Island, March 10-12th 2010.
- NANOMEET-2010, Anna University, Chennai, India
- International Workshop on Advances in Nanoscience and Nanotechnology, Anna University, Chennai, India, October 28th -30th 2009.
- The Seventh International Symposium Effects of Surface Heterogeneity in Adsorption and Catalysis on Solids, Kazimierz, Poland, July 4th to July 11th 2009.
- 3rd International Symposium on Advanced Materials, Daegu, South Korea during Feb. 5-6, 2009
- International Symposium on Nanocomposites and Nanoporous Materials, South Korea, May 14-16, 2008.
- International conference on Nanomaterial and its applications (ICNA-2007), India.
- International Symposium on Nanostructure and Nanoporous Materials, South Korea, February, 2006.

Project Track Record - Funding Secured

The innovative nature and commercial potential of research from my group is shown by the 18 national and international patents I have received more than \$6.5 Million Dollar from both industry and government funding agencies. Funding includes:

Industry Funding and consultancy include:

- \$1.6 Million, SABIC (2015-2017)
- Ca. 0.7 Million Dollar grant, Highly Cited Research Project (KSU, Saudi Arabia – 2015-2016)
- Ca. \$100,000 Consultancy grant from KSU, Saudi Arabia (2015)
- Ca. \$100,000 Grant from Solvey-EWHA Joint Project (2015)
- Ca. \$72,000 Consultancy grant from KSU and Qatar University, Saudi Arabia (2014)
- \$100,000, KACST, Saudi Arabia
- Consultancy Grant, Dia33, Dubai, 30,000 AUS dollar
- Consultancy Grant, ZnO Australia, Australia, 11,000 AUS dollar
- KFUPM, Saudi Arabia (48200 AUS dollar)

- Kurita Water Industries and Taiyo Kagaku funding (20000 USD)
- KFUPM, Saudi Arabia project grant 40000 USD for 2010 & consultancy grant (150000 USD–2009-2012).

Academic Grants

- \$324,700, DP150104828 (2015-2017) ARC Discovery grant for the project entitled: “Design of Functionalized Mesoporous Fullerenes for Clean Energy” Prof. Ajayan Vinu (CI) and Prof. Mietek Jaroniec (PI)
- \$100,000 AUS dollar, KACST-Technical Innovation Centre 2012
- ARC Future Fellowship Grant ca. 1 Million Aus dollar (2011-2016)
- \$1 Million US dollar grant from Ministry of Education, Culture, Sports, Science & Technology (MEXT) in 2007 for three years under the Asian research and development programme in the field of fuel cells.
- Kakenhi (30000 USD (2010-2011); 30000 USD (2007-2009)), JSPS, Japan
- MANA (180000 USD – 2008; 150000USD – 2009; 120000USD – 2010)
- NIMS Instrument competition fund NIMS (100000 USD – 2008)
- NIMS fellowship grant of 60000USD pa from 2007 to 2010
- Nanoionic materials group, NIMS (180000 USD – 2006; 150000 USD – 2007; 50000 USD -2010)
- I have also established a NIMS-India materials research center in Indian Institute of Chemical Technology with the help of MEXT and NIMS, and Japan through Indo-Japan research collaboration (100000 USD –2009-2011).

Submitted grants

- Submitted the project to SABIC for establishing the center for energy storage and conversion for the amount of **6.5 Million AUS dollar**.
- Submitted the project to Deanship of King Saud University for the establishment of Global Innovative Center for Advanced Nanomaterials for the amount of **8 Million AUS dollar**.
- Submitted a project entitled: Novel Functionalized Nanoporous Carbons for Supercapacitors to the Advanced Materials Chair, KSU for the amount of **45,000** AUS dollar.
- Submitted a project entitled: Carbon Nanotube Entangled Porous Carbon for Energy Storage Application to KACST, KAU - **\$125,000**

Conference Organization/Chairing

- Co-Chair, IMMS 2015, August 18-21, 2015, Brisbane, Australia.
- Chaired session in the 6th PCGMR-NCKU Symposium Nano-Technology/Materials for Future Devices & Bio/Medical Applications, 2-5, September 2014, Taiwan
- One of the organising committee members of MANA/ICYS Reunion Workshop 2014, March 2-4 2014, Japan
- Organized 1st International Conference on Emerging Advanced Nanomaterials ICEAN 2012, October 2012, Brisbane, Australia that attracted more than 650 participants from ca. 25 different countries including 550 researchers from abroad.
- Organized International Workshop on Advanced Functional Nanomaterials in Anna University, India from February 21-24, 2011.
- Organized NIMS-EWHA workshop in NIMS, Japan, August 27th 2010.
- Organized International Workshop on Advanced Nanoporous Materials, IWANA-2009 at NIMS Japan, August 7th 2009.
- Organized NIMS-Indo workshop on Advanced Materials (INWAM-09) from 22-23rd December 2009 at Hyderabad, India
- Chaired a session in the **IUMRS-2008** conference which was held in Nagoya, Japan in December 2008.
- Chaired a session in the International conference which was held in Yonsei University, Korea in November 2008.

- Chaired a session in the **IMMS 2008** conference which was held in Namur, Belgium, September 2008.
- Chaired a session in the **International conference on recent progresses and perspectives in nanoporous and mesoporous materials**, S. Korea, July 2008.
- Chaired a session in the **International conference on nanoporous and nanocomposite materials 2008** which was held in South Korea in May 2008
- Chaired a session in the **Nanopore V conference** which was held in Vancouver, Canada, May 2008.
- Chaired a session in the International conference on advanced materials, NEERI, India, October 2007.
- Chaired a session in the **IMMS 2006 conference** which was held in Shanghai, China, August 2006.
- Chaired a session in the **ICONN 2006 conference** which was held in Brisbane, Australia, July 2006.
- Chaired a **Zeolitic materials session** in the 3rd FEZA international conference on micro and mesoporous materials, Praha, Czech, August 2005.
- Chaired a **nanoporous carbon session** in the international conference on nanoporous materials, Niagra Falls, Ontario, Canada, June 2005.
- Chaired a complete nanotechnology session in the international conference on advanced materials and processing held at IIT Kharagpur, India, December 2004.
- Chaired a complete biomaterials session in the first international Japan-UK symposium on nanotechnology held at Tsukuba, NIMS, Japan, and September 2004.

Reviewer of the Following Journals

Angewante chemie international; The journal of American chemical society; Advanced materials; Advanced functional materials; Chemistry: a European journal; European journal of inorganic chemistry; Chemical Communications; Inorganic Chemistry; Chemistry of materials; Langmuir; Physical chemistry and chemical physics; Crystal growth and design; Environmental science and technology; Industrial engineering and chemical research; Soft matter; Journal of physical chemistry B; Carbon; Applied physics letter; Journal of materials chemistry; Chemistry- an Asian journal; Journal of materials research; Solid state communications; Journal of chemical technology and biotechnology; Journal of molecular catalysis A: Chemical; Applied catalysis A General; Applied catalysis B Environmental; Journal of Nanoscience and Nanotechnology; Catalysis communications; Catalysis letters; Catalysis today; Chemistry letters; Microporous and mesoporous materials; Studies in surface science and catalysis; Physiological magazine letters; Food hydrocolloids; Czechoslovak chemical communications; Materials research bulletin; Journal of American ceramic society; Journal of photochemistry and photobiology; International journal of nanotechnology; Journal of alloys and compounds; Brazilian journal of chemical engineering; Journal of Biomedical Materials Research Part B: Applied biomaterials; Materials Chemistry and Physics; Chemical society reviews; Journal of applied physics; Chemical physics letters; Applied clay science; Solid state sciences; Encyclopedia of Industrial biotechnology; AIChE Journal; Journal of the American ceramic society; Materials science and engineering C; Applied surface science; Materials Letters, Advanced Synthesis and Catalysis; Nanoscale; Arabian Journal of Chemical Engineering, Journal of Hazardous Materials, Open Catalysis Journal, Journal of Nanoparticle Research; Journal of Membrane Science; Polish Journal of chemical technology, Collection of Czechoslovak Chemical Communications; International Journal of Nanotechnology; ChemSusChem; Journal of physical chemistry C; Bulletin of chemical society of Japan; Journal of biomedical research; Journal of Brazilian chemical society; International journal of molecular science; Journal of nanoparticle research;

Selected Plenary and Invited Lectures at International Conferences

My research has attracted worldwide attention and I have developed a new area of research including the discovery of mesoporous carbon nitride, boron carbon nitride and boron nitride, carbon nanocage, carbon nanocoop, etc. I have been invited to deliver presentations at numerous international conferences, workshops and seminars and chaired sessions of several international conferences. I have visited institutes

in more than 30 countries to deliver lectures and gave ca. 160 lectures including 15 plenary and 20 keynote lectures at international conferences as well as ca. 125 invited talks.

Recent plenary and keynote lectures are given below:

- 2006 International Symposium on Nanostructure and Nanoporous Materials, South Korea (**Plenary**)
- 2006 Pre ZMPC2006, Japan; (**Keynote**)
- 2008 CSJ conference, Rikko University, Japan (**Award Lecture**)
- 2008 International Symposium on Nanocomposites and Nanoporous Materials, South Korea (**Plenary**)
- 2008 41st Symposium on Catalysis, Prague, Czech Republic (**Plenary**)
- 2008 18th Annual Saudi-Japan symposium, Dhahran, Saudi Arabia (**Keynote**)
- 2008 Workshop on Emerging Materials & Active Polymer Patterning, Yonsei University, S. Korea. (**Keynote**)
- 2008 International Symposium on Materials Chemistry (ISMC-2006), BARC, India (**Keynote**)
- 2009 3rd International Symposium on Advanced Materials, Daegu, South Korea (**Keynote**)
- 2009 3rd Workshop on Renewable Energy: Advances in Fuel Cell Technology, KFUPM, Saudi Arabia (**Plenary**)
- 2009 Polish Zeolite Forum, Poznan (**Plenary**)
- 2009 ISSHAC meeting, Poland (**Keynote**)
- 2009 Pre-ZMPC 2009, Inha University, South Korea (**Keynote**)
- 2009 International Workshop Advances in Nanoscience & Nanotechnology, Chennai, India (**Keynote**)
- 2010 3rd International Conference on Nanostructures, Kish Island (**Keynote**)
- 2010 Nanomeet, Anna University, India (**Plenary**)
- 2010 International Mesoporous Materials Conference Italy (**Keynote**)
- 2010 International workshop on Indian Society for Chemists and Biologists (**Award Lecture**)
- 2010 University of Erlangen, Germany (**Colloquium** Lecture)
- 2010 7th International Conference on Mesostructured Materials, Italy (**Keynote**)
- 2010 5th International Workshop on Emerging Functional Materials, France (**Keynote**)
- 2010 INDO-ITALIAN advanced level workshop on semiconductor nanostructures, India (**Keynote**)
- 2010 20th national symposium on catalysis, India (**Award Lecture**)
- 2011 15th ISCB conference, India (**Plenary**)
- 2011 International conference on advanced functional nanomaterials, India (**Keynote**)
- 2011 23rd German Zeolite Meeting, Germany (**Plenary**)
- 2011 Nanokat, Germany (**Plenary**)
- 2012 International Symposium on Physics and Technology of Sensors, India (**Plenary**)
- 2012 ICMST 2012, India (**Keynote**)
- 2012 SPIE, Nanosystems in Engineering and Medicine Nanoengineering, South Korea (**Keynote**)
- 2012 International Conference on Emerging Advanced Nanomaterials, Australia (**Keynote**)
- 2013 Second International Workshop on Advanced Functional Nanomaterials (SIWAN-2013), India (**Keynote**)
- 2013 International Workshop on Advanced Materials for Energy and Environment, Kyunpook National University, South Korea (**Plenary**)
- 2013 Nanomeet, Anna University, India (**Plenary**)
- 2013 Clay and Composite Conference, South Korea (**Plenary**)
- 2014 International Workshop on Nanogrid Materials, S. Korea (**Plenary**)
- 2014 International Conference on Applications of Advanced Materials on Sustainable Development, India (**Plenary**)
- 2014 International Conference on Chemistry, Abha, Saudi Arabia, (http://www.nature.com/natureevents/science/events/23321-5th_International_Chemistry_Conference) (**Keynote**)
- 2014 Nanoporous 7, Niagrafalls, Canada (**Keynote**)
- 2014 6th PCGMR/NCKU Symposium on Nanotechnology/materials for Future Device, Taiwan (**Plenary**)
- 2014 2nd International conference on global trends in pure and applied chemical sciences, Hong Kong, China (**Keynote**)

- 2015 International Conference on Advanced Materials and Manufacturing Processes for Strategic Sectors (ICAMPS 2015), Kovalam, India (**Plenary**)
- 2015 Korean Clay Society Conference, Seoul, Korea (**Plenary**)
- 2015 International Workshop on Graphene and C₃N₄-based Photocatalysts (IWGCP) (**Keynote**)
- 2015 ICMAT-2015, Singapore (**Keynote**)
- 2015 International Symposium on Advanced Functional Materials, Daegu, Korea (**Plenary**)
- 2015 Corrosion and Protection of Materials (CPM 2015), Hanoi, Vietnam (**Plenary**)

Details of My Present and Past Group Members

I have also supervised more than 30 post doc fellows and guided ca. 25 PhD students including the students who worked in my lab for a long period through collaboration from several countries. More than 90% of these students have taken up postdoctoral positions at leading academic institutions including RPI, USA, ISU, USA, CNRS, France, AIST, Japan, Nagoya University, Japan or are employed in industry including GE, India. I have also been a PhD thesis examiner for Max Planck Institute, Postdam, Germany, University of Pune, India, Acharya Nagarjuna University, India and Cairo University, Egypt

Post docs at UQ: Dr. Y. Sugi, Dr. C. Anand, Dr. M. Suresh, Dr. Javed Zaidi

Present PhD Students: Mr. G. Lawrence, Miss. Mercy Benzigar, Mr. Wang Soo Choy, Mr. Stalin Joseph, Mr. Kripal Lakhi

Former Post Doctoral Researchers: Dr. Murugulla A. Chari; Dr. Ulka B Suryavanshi; Dr. S. Anandan; Dr. S.K. Mondal; Dr. P. Karandhigar; Dr. N. Gokulakrishnan; Dr. M. Murugan; Dr. V.V. Balasubramanian; Dr. P. Srinivasu; Dr. D.P. Sawant; Dr. R. Logudurai; Dr. P. Kalita; Dr. Chandrabose; Dr. Velmathi; Dr. J. Ramkumar; Dr. Lichao Jia; Dr. Tanaji Gujar; Dr. Sher Alam; Dr. Rajashree Chakravarthi; Dr. C. Anand; and Dr. Lung-Ching Sang, Dr. M.A. Wahab, Dr. C. Seubert, Dr. D. Dhawale, Dr. Priya Anand, Dr. Lin Zhong

Former PhD Students and the students who visited my lab: Miss. Mercy Rose; Miss. Padma, Mr. Chokkalingam. Anand; Mr. Jebum Choi, Miss. Geradin, Miss. Merisa, Mr. Tamil Selvan; Mr. Balaraman Satyaseelan; Mr. Pradeep Kumar; Mr. Jeonghun Kim; Mr. Hee Joon Jung; Mr. H. Oveisi; Mr. Leila Samie; Ms. Xin Jin; Mr. Chokkalingam Anand (Second time); Mr. L. Kumaresan; Mr. P. Azhagapillai; Mr. Lung-Ching (Michael) Sang; Mr. Shetty; Mr. Balamurugan; Mr. Dutta; Miss. Kalyani; Miss. Vinila; Mr. Seogjae Seo; Mr. Jinwoo Sung; Mr. Byeong Gwan Kim; Mr. Yeon-sik Choi; Miss. Stacy, Mr. Siddulu Naidu; Mr. Gurudas Mane; Mr. Saravanan; Mr. Satheesh; Miss. Shipra Chuhan; Mr. S. Varghese; Miss. Malar, Miss. Zhang, Mr. Stalin Joseph, Mr. Fahad, Mr. S. Prasad, Mr. Kripal L. Singh, Mr. N. Okamoto, Mr. Venkat,

Researchers (except students and post docs) visited my group

1. Dr. Rajiv Kumar, Tata Chemicals, India, 2. Dr. S.B. Halligudi, NCL, India, 3. Dr. Velmathi, NIIT, India, 4. Dr. J.-C. Chang, KRICT, Korea, 5. Dr. Y.-K. Hwang, KRICT, Korea, 6. Dr. V. Murugesan, Anna University, India, 7. Dr. A.K. Tyagi, BARC, India, 8. Dr. J. Cejka, J.H. Institute of Physical Chemistry, Prague, Czech Republic, 9. Dr. J.R. Lee, KRICT, S. Korea, 10. Dr. C. Satyanarayana, NCL, Pune, India, 11. Dr. TPD Rajan, RRL, Trivandrum, India, 12. Lakshmi Kantam, IICT, Hyderabad, India; 13. Dr. K.V.R. Chary, IICT, Hyderabad, India, 14. Dr. A. Neimark, Rutgers University, USA; 15. Dr. T. Mukherjee, BARC, India, 16. Dr. M.O. Coppens, RPI, Troy, USA, 17. Dr. S.B. Halligudi (May 2008), NCL, Pune, India, 18. Dr. S. Reddy, IICT, Hyderabad, India. 19. Dr. M. Jaroniec, Kent State University, Ohio, USA, 20. V.Y. Lin, Iowa State University, USA. 21. Dr. S. Ernst, Technical University of Kaiserslautern, Germany, 22. Dr. M. Hartmann, University of Erlangen, Erlangen, Germany, 23. Dr. A. Sayari, University of Ottawa, Canada, 24. Dr. D. Srinivas, NCL, Pune, India, 24. Dr. M. Thomass, Quantachrome, USA, 25. Dr. J. Cejka, Prague, Czech Republic (second visit), 26. Dr. S.-E. Park, Inha, S. Korea, 27. Dr. E. Kim, Yonsei, Yonsei University, S. Korea, 28. Dr. C. Park, Yonsei, Yonsei University, S. Korea, 29. Dr. J.R. Lee, KRICT, S. Korea, 30. Dr. L. Kantam, IICT, Hyderabad, India, 31. Dr. J.S. Yadav, IICT, Hyderabad, India, 32. Dr. R. Jayavel, Anna University, India, 33. Dr. S.B. Halligudi, C-MET, India (third visit). 34. Dr. J.V. Zaidi (KFUPM), Saudi Arabia. 35. Dr. K.N. Ganesh, IISER, Pune,

India, 36. Dr. Ajay Ghosh, NIIST, Trivandrum, India, 37. Dr. Nitin, NEERI, India, 38. Dr. Chandrabose (two times). 39. Dr. Ganesh, Anna University, India, 40. Dr. Vivekanandan, Anna University, India. 40. Dr. Arivuoli, Anna University, India, 41. Dr. P. Selvam, IIT Chennai, India, 42. Dr. Chennupati Jagadish, ANU, Australia, 43. Dr. Choy, EWHA, S. Korea, 44. Dr. Fabrice, CNRS, France, 45. Dr. Attias, Marie Curie, France, 46. Dr. Gennady Gorr, USA, 47. Dr. Hideaki, YNU, Japan, 48. Dr. Inagaki, Toyota R&D, Japan, 49. Dr. D. Zhao, Fudan, China, 50. Dr. Nagarajan, Annamalai University, India, 51. Dr. Subba Reddy, IICT, India (second visit), 51. Dr. M. Derownshky, Crackow, Poland, 52. Dr. Nagarajan, Anna Malai University, India. Prof. Dong-Soo Shin, Prof. KN Ganesh, Prof. R. Jayavel,

Initiation of MOU with Universities and Institutes around the World

I have developed an extensive network of collaborations with researchers in more than 15 countries from five continents. These include; RPI, USA, Kent State Uni. Ohio USA, Max Planck Stuttgart, Univ. Kaiserslautern, Germany, UQ Australia, ANU Australia, Yonsei Univ. Korea, Fudan Univ. China, JNCASR, IICT, Anna Univ, and NCL, India.

- Indian Institute for Science and Education Research, Pune, India (Dr. Ganesh)
- Yonsei University, Korea (Prof. E. Kim)
- Rensselaer Polytechnic Institute, Albany Troy, USA (Prof. M.O. Coppens)
- Kent State University, Ohio, USA (Prof. Mietek Jaroniec)
- Anna University, Chennai, India (Prof. V. Murugesan)
- National Chemical laboratory, Pune, India (Prof. C. Satyanarayana)
- Jawaharlal Nehru center for Advanced Scientific Research, Bangalore, Jakkur, India (Prof. CNR Rao)
- Australian National University, Canberra, Australia (Prof. Jagadeesh)
- Korean Research Institute of Chemical Technology, South Korea (Prof. J.S. Chang)
- National Institute of Technology, Trichy (Prof. S. Velmathi)
- “Joint Graduate School Programme” with Anna University, Chennai (Prof. Jeyavel)
- “Joint Graduate School Programme” with JNCASR, Bangalore (Prof. CNR. Rao)
- “Joint Graduate School Programme” with Yonsei University, Korea (Prof. E. Kim)
- MOU with IICT, Hyderabad
- NIMS-IICT center agreement with IICT, Hyderabad, India
- MOU with NEERI, India.
- MOU with National Center for Catalysis, IIT Chennai, India.
- MOU with King Saud University, Riyadh, Saudi Arabia
- MOU with University of Erlangen, Erlangen, Germany
- MOU with EWHA University, Seoul, S. Korea.
- MOU with Pusan National University, South Korea

Details of the Research Collaboration around the World

Prof. M. Terrones, Advanced Materials Department IPICyT, San Luis Potosi, SLP, Mexico, **Prof. J. Cejka**, Czech Republic, **Prof. M.O. Coppens**, RPI, USA, **Prof. B. Sels**, University of Leuven, Belgium, **Prof. J. Michalik**, Institute of Nuclear Chemistry and Technology, Poland, **Prof. J.-S. Chang**, **Prof. J.-R. Lee**, **Prof. Y.-K. Hwang**, KRICT, South Korea, **Prof. R. Brzozowski**, Industrial Chemistry Research Institute, Poland, **Prof. A. Bose**, University of Rhode island, USA, **Prof. Ramnath**, RPI. Troy, USA, **Dr. S. B. Halligudi**, **Dr. Rajiv Kumar**, **Dr. C.S. Gopinath**, **Dr. Satyanarayana** from NCL, Pune, India, **Prof. S. Ram**, Indian Institute of Technology, Kharagpur, India, **Prof. A.K. Tyagi**, BARC, Mumbai, India, **Prof. W. Bohlmann**, **Dr. Uma** and **Dr. A. Poepl**, University of Leipzig, Germany, **Prof. M. Hartmann**, University of Erlangen, Germany, **Prof. V. Murugesan**, **Prof. R. Jeyavel**, **Prof. Arivuoli**, **Prof. M. Palanichamy**, **Prof. A. Pandurangan**, Anna University, Chennai, India, **Prof. Max Lu**, UQ, Australia, **Prof. J. Drennan**, UQ, Australia, **Prof. S. Jagadeesh**, ANU, Australia, **Dr. A. Beitulla**, IUST, Iran, **Dr. E. Kim**, and **Dr. C. Park**, Yonsei University, Korea, **Dr. S.-E. Park**, Inha University, Korea,

Prof. M. Jaroniec, KSU, USA, **Dr. C.-S. Ha**, Pusan University, Korea, **Dr. J. Zaidi**, KFUPM, Saudi Arabia, **Dr. L. Kantam**, **Prof. J.S. Yadav**, **Prof. S. Reddy**, **Prof. BM. Reddy**, **Prof. Manorama**, **Prof. KVR. Chary**, IICT, India, **Prof. CNR Rao**, and **Prof. I. Eswaramoorthy**, JNCASR, India, **Dr. Bose and Dr. Velmathi**, NIT, Trichy, India, **Dr. S. Rayalu and Dr. N. Labhsetwar**, NEERI, India. **Dr. Salem**, KSU, Saudi Arabia, **Dr. Choy**, EWHA, Seoul, Korea, **Dr. Suresh Bargawa**, RMIT, Australia, **Prof. Thomas Bein**, LMU, Germany, **Prof. Markus Antonitsee**, MPI Colloids and interfaces, Potsdam, Germany, **Prof. Stefan Kaskel**, TUD, Germany.

Research Facilities in Vinu's Group in Australia

- ✚ CV - CH instruments - 760 D - Electrochemical workstation
- ✚ 8-Channel Battery Cycler for Electrochemical measurements.
- ✚ 3A Class Solar Simulator with QE/IPCE Kit
- ✚ Two port glove box with oxygen and moisture sensing
- ✚ Home made water and CO₂ splitting photocatalytic set-up with online GC
- ✚ Quantochrome Autosorb-IQ-2-N₂ Adsorption and desorption measurements- 2 Port
- ✚ Quantochrome Quadrasorb SI- Mesoporous- 4 Port
- ✚ Quantochrome Quadrasorb SI- Microporous- 4 Port
- ✚ Micromeritics ASAP 2420-6 Port
- ✚ Micromeritics Tristar II- 3 Port
- ✚ Micromeritics Autochem II- Chemisorption Analyser, TPD, TPO, and TPR
- ✚ Elemental Analyzer (CHNS&O) FLASH 2000 For both Solid and Liquid
- ✚ GC with autosampler (Shimadzu GC-2010 Plus)-150 Sample port
- ✚ GC with Manual sampler (Shimadzu GC-2010 Plus)
- ✚ Hot Air ovens (Isotherm) - 5 numbers
- ✚ LABEC Hot Air ovens - 1 numbers
- ✚ LABEC high temperature tubular furnaces - 3 numbers
- ✚ Microwave-Elthos EZ Microwave digestion system (Milestone)-high temperature 20 to 300 °C with rotation mode
- ✚ Ozone cleaner for photo functionalization (Filgen)
- ✚ LABEC Muffle furnace - 2 numbers
- ✚ Vacuum Oven – 2 number
- ✚ Vacuum evaporator
- ✚ Electronic magnetic stirrers-30 numbers
- ✚ Stainless steel autoclaves with teflon lining-15 numbers
- ✚ PARR autoclaves-120 ml and 23 ml
- ✚ PARR reactor with controller and autoclave (4848)
- ✚ Parallel reactor with 12 reactor port
- ✚ Chino reactor and autoclave for high temp reaction-4 numbers
- ✚ Aspirator (Eyela)- 2 numbers
- ✚ Julabo Water circulator
- ✚ Rota Vapour (Buchi)-2 numbers
- ✚ Tablet machine for electrode pressing
- ✚ Weight balance (Shimadzu) - 4 numbers
- ✚ Microcentrifuge Machine
- ✚ pH Meter
- ✚ Automated melting point system (Stanford Research System)
- ✚ UV chamber (UVP)
- ✚ Sonication and shaking baths with temperature and time controller (Unisonic)
- ✚ Refrigerator
- ✚ Nice lab for the synthesis nanoporous materials with 5 fume hoods

In addition to above equipments, The University of Queensland (UQ) possesses outstanding infrastructure facilities. The instruments located at the Australian National Fabrication Facility (ANFF), the Australian

Microscopy & Microanalysis Research Facility in the Centre for Microscopy and Microanalysis (CMM), and the ARC Center of Excellence for Functional Nanomaterials in Australian Institute for Bioengineering and Nanotechnology (AIBN), will provide unparalleled synthesis, analysis and characterisation opportunities. For example, equipment such as X-ray diffractometer, UV-Vis spectrophotometer, HRSEM, HRTEM with energy dispersive X-ray spectroscopy, ICP-AES, ICP-MS, and X-ray photoelectron spectroscopy are available to mesoporous materials.

Areas of Interest

Nanomaterials: Nanoporous materials including silicas, metallosilicates, polymers, fullerenes and carbides, Nanocarbons including graphenes, carbon nanocages, CNTs, and porous carbons, Nanoporous semiconductors including nitrides (CN, BCN, GaN, AlN), metal chalcogenides, transition metal oxides and phosphides, etc, Nanoporous Biomolecules, Nanoporous conducting polymers, and Nanohybrid systems.

Applications: Energy storage and conversion (supercapacitors and fuel cells), Magnetism, photoelectrochemical conversion (water splitting and CO₂ reduction), CO₂ capture and conversion, adsorption and separation (toxic compounds and fine chemicals), heterogeneous catalysis, and sensing using nanoporous materials

Research Achievements

- ✚ Discoverer of carbon Nanocage, cage type mesoporous carbon materials
- ✚ Inventor of mesoporous carbon nitride, carbon nitride nanocage molecular sieves
- ✚ Inventor of mesoporous BN and BCN materials
- ✚ Inventor of mesoporous fullerenes
- ✚ Discoverer of carbon nanocoops and silica nanocoops
- ✚ Developed the procedure for creating nanoporosity in the biomolecule

List of Papers, Books, and Patents Published/Communicated

Books

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17. **A. Vinu**, K. Ariga, M. Terrones, D. Golberg, T. Mori, Porous Boron Nitride and Boron Carbon Nitride Material and Method for Preparation Thereof, **JP4803422; 2007-31170; Application No. 2005-212474, 22nd of July 2005 (Granted)**.
18. T. Mori, M. Takahashi, **A. Vinu**, C. Nishimura, Pt/CeO₂/Conductive Carbon Nano-hetero Anode and its Preparation Method, Japanese patent, **WO2006006739-A1 ; US2008073619-A1 ; JP2006529286-X ; US7563394-B2 ; JP5164089-B2; 7th July, 2004; PCT/JP2005/013433 (Granted)**.
19. **A. Vinu**, K. Ariga, D. Golberg, T. Mori, Y. Bando, T. Nakanishi, Preparation and Characterization of Mesoporous Hexagonal Carbon Nitride, Japanese patent, **WO2006046756-A1; JP2006124250-A; JP4941953-B2 October 29 2004. Appl. No. 2004-316596 (Granted)**.

Plenary and Keynote Lectures

1. **Plenary Lecture**, Development of Novel Mesoporous CN, BN, BCN and Carbon Molecular Sieves with Tunable Pore Diameters and their Applications, International Symposium on Nanostructure and Nanoporous Materials, South Korea, February, 2006.
2. **Plenary Lecture**, Development of novel mesoporous materials with tunable pore diameters and their applications in adsorption and catalysis, Tokyo Symposium on Nanoarchitecture of Porous Materials, Pre ZMPC2006, Date: 29-07-2006.
3. **Award Lecture**, Novel nanoporous Materials and their Application, March 28 2008, CSJ conference, Rikko University, Japan.
4. **Plenary Lecture**, Novel nanoporous Materials and their Application, International Symposium on Nanocomposites and Nanoporous Materials, South Korea, May 14-16, 2008.
5. **Plenary lecture**: Highly acidic nanoporous materials and their application in catalysis, 41st Symposium on Catalysis, November 3-6, 2008, Prague, Czech Republic.
6. **Keynote Lecture**: Three Dimensional Cage Type Mesoporous Catalysts for Acylation & Alkylation, November 16-17, 2008, Dhahran, Saudi Arabia.
7. **Keynote Lecture**: Nanoporous carbons and their application in sensing and fuel cells, Yonsei University, November 19-22nd, 2008, South Korea.
8. **Keynote Lecture**: Novel Nanoporous Materials for Fuel Cells and Sensing, December 2nd, 2008. BARC, India.
9. **Keynote Lecture**: Recent advances in Nanoporous Materials and their Applications; 3rd International Symposium on Advanced Materials, Daegu, South Korea during Feb. 5-6, 2009.
10. **Plenary Lecture**: Advanced Functional Materials for Energy and Environment, Third Workshop on Renewable Energy: Advances in Fuel Cell Technology, KFUPM, April 5th 2009, Saudi Arabia.
11. **Plenary Lecture**: Fabrication and catalytic applications of novel mesoporous materials, Polish Zeolite Forum, Poznan, July 1st 2009.
12. **Keynote Lecture**: ACIDIC Nanoporous Materials and their Application in Fine Chemical Synthesis – ISSHAC meeting, Poland – 7th of July 2009.
13. **Keynote Lecture**: Nanoporous Carbon Based Materials and their Electro catalytic Applications, Pre-ZMPC 2009, Inha University, South Korea, July 30th-August 1st 2009.
14. **Keynote Lecture**, Structural Control of Novel Nanoporous Materials and their Multiple Functions International Workshop On Advances in Nanoscience and Nanotechnology, Anna University, Chennai, India, October 28th -30th 2009.
15. **Award Lecture**, Multifunctional Nanoporous Materials, 14th International workshop on Indian Society for Chemists and Biologists, Lucknow, January 15-19th, 2010.
16. **Keynote Lecture**, Nanoporous Materials and their multiple Applications, 3rd International Conference on Nanostructures, Kish Island, March 10-12th 2010.
17. **Plenary Lecture**, Advanced Functional Nanoporous Materials for Multiple Applications, Nanomeet 2010, Chennai, India, March 25-26th.
18. **Colloquium Lecture**, Novel Advanced Functional Nanoporous Materials for Catalytic Applications, University of Erlangen, Germany, May 18-23rd 2010.
19. **Keynote Lecture**, Applications of Carbon Based Nanoporous Materials, 7th International Conference on Mesoporous Materials, Sorrento, Italy, July 4-9th 2010.

20. **Keynote Lecture**, Advanced Functional Nanoporous Carbon Based Materials and their Application, 5th International Workshop on Emerging Functional Materials, University of Marie Curie, Paris, France, July 22-25th 2010.
21. **Keynote Lecture**, Novel Advanced Functional Nanoporous Materials for Catalytic Applications, INDO-ITALIAN advanced level workshop on semiconductor nanostructures, Chennai, India, September 7-10th 2010.
22. **Invited Special Lecture**, Advanced Nanoporous Materials with Functional Elements and their Catalytic and Electro catalytic Applications, King Saud University, Riyadh, Saudi Arabia, December 12th 2010.
23. **Award Lecture**, 20th national symposium on catalysis, Multiple Applications of Nanoporous Materials with Functional Elements, IIT Chennai, India, December 19-22nd 2010.
24. **Plenary Lecture**, 15th ISCB conference, Fabrication and the Applications of Hierarchically Ordered Nano/Macroporous Films and Powders, Rajkot, Gujarat, Feb. 4-7th 2011.
25. **Keynote Lecture**, International conference on advanced functional nanomaterials, Nanoporous Non-siliceous Materials with Ordered Nanoporous Structure and their Application Possibilities, Chennai, Anna University, Feb. 21-24th 2011.
26. **Plenary Lecture**, 23rd German Zeolite Meeting, Advanced Functional Nanoporous Non-siliceous Materials and their Application Possibilities, University of Erlangen, Erlangen, Germany, March 2-4th 2011.
27. **Plenary Lecture**, Nanokat, Advanced Functional Nanoporous materials and their Catalytic Applications, University of Kaiserslautern, Kaiserslautern, Germany, April 14th 2011.
28. **Plenary Lecture**, Sensing Applications of Nanoporous Materials, International Symposium on Physics and Technology of Sensors, March 8-11, 2012, C-Met, Pune, India. March 8-11th 2012
29. **Keynote Lecture**, Biomolecule immobilization over nanoporous silica and non-siliceous materials and their application in biosensing, SPIE, Nanosystems in Engineering and Medicine Nanoengineering, Songdo Convensia, Incheon South Korea **10-13th of September 2012.**
30. **Plenary Lecture**, Functional Nanoporous Materials For Selective Sensing And Energy Storage, Workshop on Celebrating 30th Teaching Anniversary of Prof. Ha, Pusan National University, South Korea
31. **Keynote Lecture**, Second International Workshop on Advanced Functional Nanomaterials (SIWAN-2013), India January 29-31, 2013 – Supported
32. **Plenary Lecture**, Advanced Functional Nanoporous Materials for Energy Storage Application, International Workshop on Advanced Materials for Energy and Environment, Kyunpook National University, South Korea, August 23, 2013
33. **Plenary Talk**, Nanomeet, Anna University, India, September 213
34. **Plenary Talk**, Clay and Composite Conference, South Korea, December 4-5th 2013.
35. **Plenary Talk**, International Workshop on Nanogrid Materials, Pusan National University, Jan. 9-10th 2014.
36. **Plenary Talk**, International Conference on Applications of Advanced Materials on Sustainable Development, Jan. 17-18th 2014, Nagpur, India
37. **Keynote Lecture**, 5th International Conference on Chemistry, Abha, Saudi Arabia, April 26-29, 2014(http://www.nature.com/natureevents/science/events/23321-5th_International_Chemistry_Conference).
38. **Keynote Lecture**, Nanoporous Materials 7, Niagra falls, Canada June 22-25, 2014.
39. **Plenary Talk**, 6th PCGMR Conference, Taiwan, September 2-5th 2014.
40. **Keynote Lecture**, 2nd International Conference on Global Trends in Pure and Applied Chemical Sciences, Hong Kong, 3-4 October 2014.
41. **Plenary Talk**, International Conference on Advanced Materials and Manufacturing Processes for Strategic Sectors (ICAMPS 2015), Kovalam, India, May 13-15, 2015
42. **Plenary Talk**, Korean Clay Society Conference, Seoul, Korea, May 29-30, 2015
43. **Keynote Lecture**, International Workshop on Graphene and C₃N₄-based Photocatalysts (IWGCP), Wuhan, China, June 5-8th 2015.
44. **Keynote Lecture**, ICMAT-2015, Singapore, June 28-July 3rd 2015

45. **Plenary Talk**, International Symposium on Advanced Functional Materials, Daegu, Korea (Plenary), August 27-28, 2015
46. **Plenary Talk**, Corrosion and Protection of Materials (CPM 2015), Hanoi, Vietnam, October 26-30, 2015

Invited Lectures

1. Development of novel mesoporous silica and carbon based materials and their applications in biomolecule adsorption and catalysis, CMM series of invited lectures, University of Illinois, October 12, 2004, USA. Link: <http://cmm.mrl.uiuc.edu/CMMseminar/2004Seminars/VinuA-041012.htm>
2. Preparation of novel mesoporous carbon and carbon based materials, Rensselaer Polytechnic Institute, Troy, New York, October 15, 2005, USA.
3. Synthesis and Pore size modification of novel mesoporous silica and carbon molecular sieves and their applications, IIT Kharagpur, December 6, 2004, India.
4. Immobilization of biomaterials onto mesoporous materials, International symposium on soft-nanotechnology, June 20-21, 2005, Hokkaido, Japan
5. Novel mesoporous materials and their application in biomolecules capturing, University of Connecticut, USA, December, 2005
6. Synthesis and application of mesoporous CN, BN, BCN and Carbon molecular sieves with tunable pore diameters, Netherlands, January, 2006
7. Catalytic performances of novel metal substituted mesoporous materials with various porous structures, University of Leuven, Belgium, January 2006.
8. Development of Novel Mesoporous CN, BN, BCN and Carbon Molecular Sieves with Tunable Pore Diameters and their Applications, Seoul National University, South Korea, February 2006.
9. Novel Mesoporous Materials and their Applications in Biomolecules Adsorption and Catalysis, KRICT, South Korea, February 2006.
10. Novel Mesoporous Materials and their Applications in Biomolecules Adsorption and Catalysis, Australian National University, Canberra, Australia.
11. **Plenary Lecture**, Development of Novel Mesoporous CN, BN, BCN and Carbon Molecular Sieves with Tunable Pore Diameters and their Applications, International Symposium on Nanostructure and Nanoporous Materials, South Korea, February, 2006.
12. **Plenary Lecture**, Development of novel mesoporous materials with tunable pore diameters and their applications in adsorption and catalysis, Tokyo Symposium on Nanoarchitecture of Porous Materials, Pre ZMPC2006, Date: 29-07-2006.
13. Novel Mesoporous Materials and their applications in Fuel cells, International conference on Nanomaterial and its applications (ICNA-2007), Invited Lecture, Trichy, India
14. Multifunctional Nanoporous Materials, October 15 2007, colloquium lecture, Max plank institute, Germany
15. Nanoporous materials and their application in adsorption and fuel cells, Invited Lecture, October 18 2007, University of Kaiserslautern, Germany
16. Nanoporous materials and their application in adsorption and fuel cells, Invited Lecture, October 19 2007, University of Augsburg, Germany
17. Multifunctional Nanoporous Materials, November 1 2007, Invited Lecture, NEERI, India
18. Nanoporous Materials, November 25 2007, Invited Lecture, Taiyo Kagaku, Yokkaichi, Japan
19. Novel Nanoporous Materials and their applications, November 3 2007, Invited Lecture, BARC, India
20. Porous Materials and their applications, December 13 2007, Invited Lecture, IISC, India
21. Multifunctional Nanoporous Materials, JNCASR, December 2007, Bangalore, India.
22. Multifunctional Nanoporous Materials, January 29 2007, Invited Lecture, Florida, USA International Ceramic Conference .
23. Novel Nanoporous Materials and their application, January 22, 2008, RPI, USA
24. Novel Nanoporous Materials and their application, January 24, 2008, KSU, USA

25. Multifunctional Nanoporous Materials and their application in adsorption and fuel cells, February 6, 2008, IROST, Iran.
26. Nanoporous Materials and their application in adsorption, catalysis and fuel cells, February 6, 2008, Tehran University, Iran.
27. Multifunctional Mesoporous Materials, February 9, 2008, Sharif University, Iran.
28. Nanoporous Materials and their application in adsorption, catalysis and fuel cells, February 9, 2008, Shahid Beheshti University, Iran.
29. **Award Lecture**, Novel nanoporous Materials and their Application, March 28 2008, CSJ conference, Rikko University, Japan.
30. **Plenary Lecture**, Novel nanoporous Materials and their Application, International Symposium on Nanocomposites and Nanoporous Materials, South Korea, May 14-16, 2008.
31. Novel Highly Acidic Nanoporous Cage Type Materials and their Catalysis, International KZA workshop, Sogang, 19-20th July 2008, South Korea
32. Fabrication and application of novel mesoporous carbons and nitrides, International workshop on catalysis, Inha University, 21st of July 2008, South Korea.
33. Novel nanoporous carbon materials and their applications, Pusan University, 22nd of July 2008, South Korea.
34. Nanoporous carbon and nitrides, Yonsei University, 23rd of July 2008, South Korea.
35. Fabrication and application of novel mesoporous carbons and nitrides, 23rd of July 2008, Sogang University, South Korea.
36. Fabrication and application of novel nanoporous materials, 7th of October 2008, NCL Pune, India
37. Multifunctional Nanoporous Materials, 6th of October 2008, Tata Chemicals, Pune, India
38. Novel Nanoporous materials and their functions, 10th of October 2008, IICT Hyderabad, India
39. Novel nanoporous materials for fuel cells and sensing applications, 14th of October 2008, BARC Mumbai, India
40. Synthesis and applications of novel nanoporous materials, 15th of October 2008, NIIST Trivandrum, India.
41. Novel nanoporous materials and their applications in fuel cells and sensing, 20th of October 2008, NIT Trichy, India.
42. **Plenary lecture**: Highly acidic nanoporous materials and their application in catalysis, 41st Symposium on Catalysis, November 3-6, 2008, Prague, Czech Republic.
43. **Keynote Lecture**: Three Dimensional Cage Type Mesoporous Catalysts for Acylation & Alkylation, November 16-17, 2008, Dhahran, Saudi Arabia.
44. **Keynote Lecture**: Nanoporous carbons and their application in sensing and fuel cells, Yonsei University, November 19-22nd, 2008, South Korea.
45. Novel Nanoporous Materials and their Applications, November 20th 2008, Kyung Hee University, Yongin, S.Korea.
46. **Keynote Lecture**: Novel Nanoporous Materials for Fuel Cells and Sensing, December 2nd, 2008. BARC, India.
47. **Keynote Lecture**: Recent advances in Nanoporous Materials and their Applications; 3rd International Symposium on Advanced Materials, Daegu, South Korea during Feb. 5-6, 2009.
48. Invited Lecture, Novel Nanoporous Materials and their Applications, KSU, Riyadh, Saudi Arabia, April 4th 2009
49. **Plenary Lecture**: Advanced Functional Materials for Energy and Environment, Third Workshop on Renewable Energy: Advances in Fuel Cell Technology, KFUPM, April 5th 2009, Saudi Arabia.
50. Invited Lecture, Fabrication and Structural Control of Nanoporous Materials and their Applications, ARAMCO, Saudi Arabia, April 6th 2009.
51. **Plenary Lecture**: Fabrication and catalytic applications of novel mesoporous materials, Polish Zeolite Forum, Poznan, July 1st 2009.
52. Novel Nanoporous Materials with Multiple Functions Max Plank Institute, Germany, 2nd of July 2009
53. **Keynote Lecture**: ACIDIC Nanoporous Materials and their Application in Fine Chemical Synthesis – ISSHAC meeting, Poland – 7th of July 2009.

54. Invited Lecture: Development, Structural Characterization and Application of Nanoporous Materials, Industrial Chemical Research Institute, Warsaw, Poland, 7th of July 2009.
55. Invited Lecture: Novel Nanoporous Materials and their Applications, Marie Curie University, Paris, France, 8th of July 2009.
56. Invited Lecture: Development, Structural Characterization and Application of Nanoporous Materials, Lyon, CNRS, France, 9th of July 2009.
57. Invited Lecture: Development, Structural Characterization and Application of Nanoporous Materials, Strasbourg, CNRS, France, 10th of July 2009.
58. Invited Lecture: Structural and Morphological Control of Novel Nanoporous Materials, Institute of Catalysis, Madrid, Spain, 13th of July 2009.
59. Invited Lecture: Structural and Morphological Control of Novel Nanoporous Materials, UNED, Madrid, Spain, 14th of July 2009.
60. Invited Lecture: Acidic mesoporous materials and their application in fine chemical synthesis, Yonsei University, South Korea.
61. **Keynote Lecture:** Nanoporous Carbon Based Materials and their Electro catalytic Applications, Pre-ZMPC 2009, Inha University, South Korea, July 30th-August 1st 2009.
62. Invited Lecture, Novel Nanoporous Materials and their Multiple Functions, International Workshop on Nanomaterials for Sustainable Development, October 13-14th 2010, Rome, Italy.
63. **Keynote Lecture,** Structural Control of Novel Nanoporous Materials and their Multiple Functions International Workshop On Advances in Nanoscience and Nanotechnology, Anna University, Chennai, India, October 28th -30th 2009.
64. **Invited Lecture,** Functional Nanoporous Materials, IICT, Hyderabad, India. December 22nd-23rd, 2009.
65. **Award Lecture,** Multifunctional Nanoporous Materials, 14th International workshop on Indian Society for Chemists and Biologists, Lucknow, January 15-19th, 2010.
66. **Invited Lecture,** Advanced Functional Nanomaterials for Energy and Environment, IUST, March 7th 2010.
67. **Keynote Lecture,** Nanoporous Materials and their multiple Applications, 3rd International Conference on Nanostructures, Kish Island, March 10-12th 2010.
68. Invited Lecture, Advanced Functional Nanomaterials for Energy and Environment, IUST, Tehran, Iran, March 7th 2010.
69. **Plenary Lecture,** Advanced Functional Nanoporous Materials for Multiple Applications, Nanomeet 2010, Chennai, India, March 25-26th.
70. Invited Lecture, Hierarchically Ordered Nano/Macroporous Films and Powder Materials and their Applications in Sensing and Catalysis, Anna University, Visiting Professor Programme, Chennai, India, April 25th 2010.
71. Invited Lecture, Nanoporous Materials and their advantages, Polymer Society of India, Trivandrum Chapter, April 30th 2010.
72. **Colloquium Lecture,** Novel Advanced Functional Nanoporous Materials for Catalytic Applications, University of Erlangen, Germany, May 18-23rd 2010.
73. Invited Lecture, Advanced Nanoporous Materials with Functional Elements and their Electrocatalytic Applications, University of Erlangen, Germany, May 21st 2010.
74. **Keynote Lecture,** Applications of Carbon Based Nanoporous Materials, 7th International Conference on Mesoporous Materials, Sorrento, Italy, July 4-9th 2010.
75. **Keynote Lecture,** Advanced Functional Nanoporous Carbon Based Materials and their Application, 5th International Workshop on Emerging Functional Materials, University of Marie Curie, Paris, France, July 22-25th 2010.
76. **Keynote Lecture,** Novel Advanced Functional Nanoporous Materials for Catalytic Applications, INDO-ITALIAN advanced level workshop on semiconductor nanostructures, Chennai, India, September 7-10th 2010.
77. **Invited Special Lecture,** Advanced Nanoporous Materials with Functional Elements and their Catalytic and Electro catalytic Applications, King Saud University, Riyadh, Saudi Arabia, December 12th 2010.

78. **Award Lecture**, 20th national symposium on catalysis, Multiple Applications of Nanoporous Materials with Functional Elements, IIT Chennai, India, December 19-22nd 2010.
79. **Plenary Lecture**, 15th ISCB conference, Fabrication and the Applications of Hierarchically Ordered Nano/Macroporous Films and Powders, Rajkot, Gujarat, Feb. 4-7th 2011.
80. **Invited Lecture**, Nanoporous Materials and their role in Adsorption, Separation and Catalysis, CSMCRI, Bhavanagar, Gujarat, March 7th 2011.
81. **Keynote Lecture**, International conference on advanced functional nanomaterials, Nanoporous Non-siliceous Materials with Ordered Nanoporous Structure and their Application Possibilities, Chennai, Anna University, Feb. 21-24th 2011.
82. **Plenary Lecture**, 23rd German Zeolite Meeting, Advanced Functional Nanoporous Non-siliceous Materials and their Application Possibilities, University of Erlangen, Erlangen, Germany, March 2-4th 2011.
83. **Invited Lecture**, Seminar at AIBN, Advanced Functional Nanoporous Non-siliceous Materials and their Application Possibilities, University of Queensland, Queensland, Australia, March 10th 2011 (8-12th).
84. **Invited Lecture**, Advanced Functional Nanoporous Non-siliceous Materials and their Application Possibilities, J. Heyrovski Institute of Physical Chemistry, Praha, Czech Republic, April 1st 2011.
85. **Plenary Lecture**, Nanokat, Advanced Functional Nanoporous materials and their Catalytic Applications, University of Kaiserslautern, Kaiserslautern, Germany, April 14th 2011.
86. **Invited lecture**, Advanced Functional Nanoporous Non-siliceous Materials and their Multiple Functions, Technical University of Dresden, Dresden, Germany, April 8th 2011.
87. **Invited Lecture**, Advanced Functional Nanoporous Non-siliceous Materials and their Multiple Functions, Technical University of Munchen, Muenchen, Germany, April 20th 2011.
88. **Invited Lecture**, Advanced Functional Nanoporous Non-siliceous Materials and their Multiple Functions, LMU, Muenchen, Germany, April 21th 2011.
89. **Invited Lecture**, Advanced Functional Nanoporous Non-siliceous Materials and their Multiple Applications, SABIC, Riyadh, Saudi Arabia, May 1st 2011.
90. **Invited Lecture**, Advanced Functional Nanoporous Non-siliceous Materials and their Multiple Functions, MPI colloids and Interfaces, Potsdam, Germany, May 11th 2011.
91. **Invited Lecture**, Advanced Functional Nanoporous Non-Siliceous Materials and their Multiple Functions, Center of Research Excellence in Renewable Energy and Center of Excellence in Nanotechnology, KFUPM, Dammam, Saudi Arabia, June 5th 2011.
92. **Invited Lecture**, Nanoporous Material with Functional Elements for Multiple Applications, Fudan University, Shanghai, China, June 22nd 2011.
93. **Invited Lecture**, Multifunctional Nanoporous Carbon Based Materials, Zhejiang University, Hanzhou, Zhejiang University, Hangzhou, China, June 24th 2011.
94. **Invited Lecture**, Multifunctional Nanoporous Carbon Based Materials, Shanghai Normal University, Shanghai, China, July 1st 2011.
95. **Invited Lecture**, Novel Advanced Functional Nanoporous Materials for Catalytic Applications, Fudan University, Shanghai, China, July 2nd, 2011.
96. **Invited Lecture**, Nanomaterials with Well-ordered Porosity for Selective Applications, International Conference On Functional Nanomaterials (ICFN 2011), Sastra University, Trichy, India, September 22-25, 2011.
97. **Invited Lecture**, Novel Functional Nanomaterials for Sensing and Energy Storage Application, International Workshop on Advanced Nanomaterials and Their Application, King Saud University, Riyadh, Saudi Arabia. October 17th 2011.
98. **Invited Lecture**, Nanomaterials with Well-ordered Porosity for Selective Applications, Sogang University, Seoul, South Korea, October 26th 2011.
99. **Invited Lecture**, Nanomaterials with Well-ordered Porosity for Selective Applications Invited Lecture, Sogang University, Seoul, South Korea, October 26th 2011.
100. **Invited Lecture**, Novel Nanoporous Functional Materials for Sensing and Energy Related Applications, 5th International symposium on Advanced Materials: Porous Materials, Daegu, KNU, Daegu, South Korea, October 27-28, 2011.

101. **Invited Lecture**, Novel Functional Nanomaterials for Sensing and Energy Storage Application, Yonsei University, Seoul, South Korea, October 29th 2011.
102. **Invited Lecture**, Functional Nanomaterials for Energy and Sensing Applications, Gifu University, Gifu, Japan, December 15th 2011.
103. **Invited Lecture**, Functional Nanomaterials for Energy and Sensing Applications, Osaka University, Osaka, Japan, December 16th 2011.
104. **Invited Lecture**, Functional Nanomaterials for Energy and Sensing Applications, Nagoya Institute of Technology, Nagoya, Japan, December 19th 2011.
105. **Invited Lecture**, Functional Nanomaterials for Energy and Sensing Applications, Toyota Central R&D Lab University, Nagoya, Japan, December 19th 2011.
106. **Invited Lecture**, Functional Nanomaterials for Energy and Sensing Applications, University of Tokyo, Tokyo, Japan, December 21st 2011.
107. **Invited Lecture**, Functional Nanomaterials for Energy and Sensing Applications, Yokohoma National University, Yokohoma, Japan, December 21st 2011.
108. **Invited Lecture**, Nanoporous Materials for Energy and Sensing Applications, 1st International Conference on Physics of Materials And Materials Based Device Fabrication (ICPM-MDF-2012), Shivaji University, Kolahpur, India. January 17-19th 2012
109. **Invited Lecture**, Nanoporous Functional Materials for Multiple Applications, AIBN group leader retreat, Peppers Salt Resort and Spa, NSW, Australia, January 19-20th 2012.
110. **Plenary Lecture**, Sensing Applications of Nanoporous Materials, International Symposium on Physics and Technology of Sensors, March 8-11, 2012, C-Met, Pune, India. March 8-11th 2012
111. **Invited Lecture**, Multifunctional Nanoporous Materials, NIIST, Trivandrum, India, June 6th 2012
112. **Invited Lecture**, Advanced Nanoporous Materials for Multiple Applications, The University of Kerala, Trivandrum, India. June 7th 2012.
113. **Keynote Lecture**, Nanoporous Materials for Energy Storage, Sensing and Catalysis, ICMST 2012, June 10-14th 2012, Kottayam, India. June 10-14th 2012.
114. **Invited Lecture**, Nanoporous Carbon Based Materials for Supercapacitors, Yonsei University, Seoul, South Korea, July 9th 2012
115. **Invited Lecture**, Hierarchically Ordered Meso-macroporous Materials for Sensing Application, Workshop - Challenges in Nanoporous and Layered Materials for Catalysis, Cheju Island, South Korea, 3-5 August 2012
116. **Invited Lecture**, Advanced Functional Nanoporous Materials for Various Applications, Changwan National University, Changwan, South Korea, August 6th 2012
117. **Invited Lecture**, Advanced Functional Nanoporous Materials for Various Applications, Pusan National University, Changwan, South Korea, August 6th 2012
118. **Invited Lecture**, Advanced Functional Nanoporous Materials for Various Applications, Ulsan University of Science and Technology, Ulsan, South Korea, August 7th 2012.
119. **Invited Lecture**, Nanoporous Materials for Catalytic, Sensing and Energy Storage Application, POSTECH, South Korea, August 7th 2012
120. **Invited Lecture**, Hierarchically Ordered Meso-macroporous Materials for Sensing Application, Kyungpook National University, South Korea, August 8th 2012.
121. **Invited Lecture**, Mesoporous Nanoarchitectures, Sungkyunkwan University, South Korea, August 9th 2012
122. **Invited Lecture**, Hierarchically Ordered Meso-macroporous Materials for Sensing Application, Seoul Womans University, South Korea, August 9th 2012.
123. **Invited Lecture**, Advanced Functional Mesostructured Materials, Hankuk University, South Korea, September 10th 2012.
124. **Keynote Lecture**, Biomolecule immobilization over nanoporous silica and non-siliceous materials and their application in biosensing, SPIE, Nanosystems in Engineering and Medicine Nanoengineering, , Songdo Convensia, Incheon South Korea **10-13th of September 2012.**
125. **Invited Lecture**, Advanced Functional Mesostructured Materials, Kookmin University, South Korea, September 12th 2012.
126. **Invited Lecture**, Advanced Functional Mesostructured Materials, University of Seoul, South Korea, September 12th 2012.

127. **Invited Lecture**, Biomolecule immobilization over mesoporous materials, Yonsei University, Wong Ju, South Korea, September 13th 2012.
128. **Invited Lecture**, Advanced Functional Mesostructured Materials, Seoul National University, South Korea, September 14th 2012.
129. **Invited Lecture**, Advanced Functional Mesostructured Materials, Inha University, South Korea, September 14th 2012.
130. **Invited Lecture**, Ordered nanostructured materials with both meso and macropores for sensing, Green Chemical Industry for Environment and Health: Fluorine Compounds, November 14th to 16th 2012, Changwon Pulman Hotel, South Korea
131. **Invited Lecture**, Nanostructured Films for Selective Sensing of Acidic and Basic Molecules, Interdisciplinary Symposium on Materials Chemistry (ISMC-2012), Mumbai, India, December 11-15 2012.
132. **Plenary Lecture**, Functional Nanoporous Materials For Selective Sensing And Energy Storage, Workshop on Celebrating 30th Teaching Anniversary of Prof. Ha, Pusan National University, South Korea
133. **Keynote Lecture**, Second International Workshop on Advanced Functional Nanomaterials (SIWAN-2013), India January 29-31, 2013 – Supported
134. **Invited Lecture**, Functional Macro-mesoporous Materials for Sensing Application, IICT, India, 27th of May 2013.
135. **Invited Lecture**, Nanoporous Materials: Structure, Properties, and Applications, Intitute of Tropical Technology, Vietnam, May 29th 2013.
136. **Invited Lecture**, Nanoporous Materials: Structure, Properties, and Applications, Institute of Chemistry, VAST, Hanoi, Vietnam, May 31st 2013
137. **Invited Lecture**, Biomolecule Functionalized Porous Architectures for Sensing, Pusan National University, South Korea, August 21, 2013.
138. **Invited Lecture**, Functionalized Nanoporous Carbon Based Electrodes for Supercapacitor Application, Changwan National University, South Korea, August 22nd 2013.
139. **Plenary Lecture**, Advanced Functional Nanoporous Materials for Energy Storage Application, International Workshop on Advanced Materials for Energy and Environment, Kyunpook National University, South Korea, August 23, 2013
140. **Invited Lecture**, Highly Ordered Porous Films and their Application in Sensing, EWHA Womans University, August 26th 2013
141. **Invited Lecture**, Biomolecule Functionalized Porous Architectures for Sensing, Yonsei University, South Korea, August 27th 2013.
142. **Invited Lecture**, Porous Carbon Based Nanostructures and their Multiple Functions, Seoul National University, South Korea, August 27th 2013.
143. **Invited Lecture**, Highly Ordered Porous Films and their Application in Sensing, Sogang University, South Korea, August 27th 2013.
144. **Plenary Talk**, Nanomeet, Anna University, India, September 2013
145. **Invited Talk**, Novel Functional Nanoporous Catalytic Materials for Adsorption and Catalysis, Qatar University, Qatar
146. **Invited Talk**, Nanoporous Materials for Disease Diagnosis and Sensing, KSU, Saudi Arabia
147. **Invited Talk**, Multifunctional Nanoporous Materials for Adsorption and Energy Storage, KSU, Saudi Arabia
148. **Invited Talk**, Multifunctional Nanoporous Materials and their Applications, KAUST, Saudi Arabia
149. **Invited Talk (Skype Lecture)**, Multifunctional Nanoporous Materials and their Applications, IIT Chennai, India
150. **Plenary Talk**, Clay and Composite Conference, South Korea, December 4-5th 2013.
151. **Invited Talk**, Shanghai Normal University, China, 24th of December 2013.
152. **Invited Talk**, Zhejiang University, China, 25th of December 2013
153. **Invited Talk**, Fudan University, China, 27th of December 2013.
154. **Plenary Talk**, International Workshop on Nanogrid Materials, Pusan National University, Jan. 9-10th 2014.

155. **Plenary Talk**, International Conference on Applications of Advanced Materials on Sustainable Development, Jan. 17-18th 2014, Nagpur, India
156. **Invited Talk**, Novel Functional Nanoporous Catalytic Materials for Synthesis of Fine Chemicals, EWHA Womans University, South Korea, February 13-14, 2014.
157. **Invited Talk**, Nanoporous Materials for Energy Storage Application, MANA reunion workshop, Japan, March 2-7th 2014.
158. **Keynote Lecture**, 5th International Conference on Chemistry, Abha, Saudi Arabia, April 26-29, 2014(http://www.nature.com/natureevents/science/events/23321-5th_International_Chemistry_Conference).
159. **Invited Lecture**, Kyoto University, Japan, May 27th 2014.
160. **Keynote Lecture**, Nanoporous Materials 7, Niagra falls, Canada June 22-25, 2014.
161. **Invited Lecture**, 5th Australia-China Symposium on Materials Science, the University of Woollongong, NSW, Australia, 20-23rd of July 2014.
162. **Plenary Talk**, 6th PCGMR Conference, Taiwan, September 2-5th 2014.
163. **Keynote Lecture**, 2nd International Conference on Global Trends in Pure and Applied Chemical Sciences, Hong Kong, 3-4 October 2014.
164. **Invited Talk**, Jilin University, China, October 6th 2014.
165. **Invited Talk**, China University of Geo Sciences, Beijing, China, October 7th 2014.
166. **Plenary Talk**, International Conference on Advanced Materials and Manufacturing Processes for Strategic Sectors (ICAMPS 2015), Kovalam, India, May 13-15, 2015
167. **Invited Talk**, KAIST, Daejeon, S. Korea, May 26th 2015
168. **Invited Talk**, Pusan National University, Pusan, May 27th 2015
169. **Invited Talk**, Changwon National University, Changwon, May 27th, 2015
170. **Invited Talk**, Yonsei University, Seoul, Korea, May 28th 2015
171. **Plenary Talk**, Korean Clay Society Conference, Seoul, Korea, May 29-30, 2015
172. **Keynote Lecture**, International Workshop on Graphene and C₃N₄-based Photocatalysts (IWGCP), Wuhan, China, June 5-8th 2015.
173. **Invited talk**, South Central University for Nationalities, Wuhan, China, June 9th 2015
174. **Invited Talk**, Wuhan University, Wuhan, China, June 9th 2015
175. **Keynote Lecture**, ICMAT-2015, Singapore, June 28-July 3rd 2015
176. **Plenary Talk**, International Symposium on Advanced Functional Materials, Daegu, Korea (Plenary), August 27-28, 2015
177. **Plenary Talk**, Corrosion and Protection of Materials (CPM 2015), Hanoi, Vietnam, October 26-30, 2015

A short CV of Prof. Ajayan Vinu, FRSC, FFMAS

Prof. Vinu has been working as a full professor and ARC Future Fellow at the University of Queensland, Brisbane, Australia since September 2011. Before moving to Australia, he had been working as a senior researcher at the national institute for materials science (NIMS), Tsukuba, Japan since 2006 after he successfully completed two years of the ICYS fellowship at the same institute and a few years of research at the Technical University of Kaiserslautern (TUK), Germany. Although Prof. Vinu registered his PhD at the Anna University, he performed most of his PhD work at the TUK, Germany (2000-2003). During these 14 years of research, Prof. Vinu has made a tremendous contribution in the field of nanoporous materials and their application in sensing, energy storage, fuel cells, adsorption and separation, and catalysis. The quality of his research has been recognised with several international awards *including Scopus Young Researcher Award 2014, Friedrich Wilhelm Bessel award by the Humboldt Society (2010), JSPS Senior Invitational Fellow for the year 2014, Australian Future Fellowship (Professorial Level) for the year 2010, Indian Society for Chemists and Biologists award for excellence for the year 2010, Catalysis Society of India Young Scientist award for the year 2010, Chemical Society of Japan Award for the Young Scientist for the year 2008, Laureate of Khwarizmi International Award 2008, Asian Excellent Lectureship Award, and ICYS fellowship*. Prof. Vinu is honoured with the **fellow of Royal Society of Chemistry, FRSC (UK) and Foreign Fellow of Maharashtra Academy of Sciences, FFMAS**. His contribution in the field of nanoporous materials is also clearly reflected by his international ranking by Science Watch as one of the top 15 researchers in the field and *has led to ca. 295 papers in*

high impact factor journals with ca. 10,500 citations and a H-index of 55. His research has been published in top journals like *Angew. Chemie, Nano Letters, J. Am. Chem. Soc., Adv. Mater, Adv. Funct., Mater. Chem., Eur. J., Chem. Mater., etc.* with an average of 750 citations per year. At least 30 of his papers have been cited more than 100 times (7 papers have been cited more than 200 times) and 54 papers have been cited more than 50 times. The innovative nature and commercial potential of my research is evidenced in the 18 national and international patents I have been awarded for novel mesoporous carbon, silica and carbon nitride materials. I have received more than \$6.5 million AUD from both industry and government funding agencies. He has also been invited to write several chapters by respected publishers including Wiley, Elsevier and American Scientific. This numerical data reveals the high quality of his research, innovative ideas and creativity. **He is the Editor of Science of Advanced Materials and Australian Editor of Journal of Nanoscience and Nanotechnology and recently, was invited and appointed as the Editor-in-Chief of Advanced Porous Materials** by the American Scientific Publishers for a period of five years. **He has been recently appointed as the Editorial Board Member of Scientific Reports, a Nature Publishing Group and Chemical Record, a Wiley Journal for three years.** Professor Vinu is also in the Editorial board of several journals namely *Journal of Nano Science and Nanotechnology, Current Science, etc.* His research has attracted worldwide attention and he has been invited to deliver presentations at numerous international conferences, workshops and seminars and chaired sessions of several international conferences. Professor Vinu has visited institutes in more than 30 countries to deliver lectures and gave ca. 175 lectures including 18 plenary and 22 keynote lectures at international conferences as well as ca. 135 invited talks. Because of his outstanding performance and collaboration activities, he was offered honorary professor position from leading universities including Hokkaido University, Japan, Yonsei University, South Korea, Kyungpook National University, South Korea, Fundan University, China, Jilin University, China, Mangalore University, India, and Anna University, India, and Adjunct Principal Researcher from Korean Research Institute for Chemical technology, Daejeon, South Korea. Professor Vinu has a network of collaborations with researchers in 15 countries. He has a strong collaborative links with the researchers from NIMS, Japan, Yonsei and EWHA Womans University and Kyungpook National University (South Korea), University of Erlangen, Germany, MPI Colloids and Interfaces, Germany, Kent State University, USA, BARC, India, and NCL and IICT, India. He established NIMS-India Materials Research Center at IICT Hyderabad and was appointed as the research director for two years. One of the active collaborations he has is with Professors Katsuhiko Ariga and Toshiyuki Mori from NIMS, Japan, mainly on the development of novel porous nanostructures for the fuel cells and sensing. Professor Vinu has organised numerous international conferences and workshops including ICEAN 2012.