



ISCB AWARD FOR EXCELLENCE 2010

IN THE AREA OF CHEMICAL SCIENCES



Dr. AJAYAN VINU

Senior Scientist

NIMS ambassador to India

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Website: <http://www.nims.go.jp/super/HP/vinu/websitevinu/V-top.htm> Dr. AJAYAN VINU

Publications: ca. 172, citation: 2250; h-index: 28;

Areas of Interest: Nanoporous Materials; Fuel Cells; Catalysis; Biomolecule Encapsulation and Biocatalysis.

Academic Highlights

2009 to till date

Research Director, NIMS-India Materials Research Center, World Premier International Research Center, National Institute for Materials Science, Japan.

2007 to till date

Senior Scientist, Group Leader, 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

2000 to 2003:

Doctor of Philosophy in Chemistry, Anna University, India (in collaboration with University of Kaiserslautern, Germany under the exchange programme)

During these six years, Dr. Vinu has made a tremendous contribution in the field of materials and their application in adsorption, separation, and catalysis. He has been really outstanding which is clearly reflected in his CV. He published more than 170 papers in well-reputed journals such as J. Am. Chem. Soc., Angew. Chemie Intl. Ed., Adv. Mater., Adv. Funct. Mater., Chem. Mater., Chem. Er. Journal, Chem. Commun. etc., and 16 patents, with the citation of more than 2250 and H-index of 28. Recipient of many international awards including Chemical Society of Japan Award for the Young Scientist, Laureate of Khwarizmi International Award, Asian Excellent Lectureship Award and ICYS fellowship.

He is very enthusiastic with a lot of ideas and has drive to obtain novel research results, and leading a big research group in NIMS, composed of different nationalities. At this young age, he has delivered more than 70 lectures including several plenary lectures and invited lectures, and chaired sessions in international conferences and visited more than 20 countries. He has been ranked as one of the top 15 researchers in the world in the field of mesoporous materials by "Science Watch".

He is also acting as a bridge to establish a strong scientific connection between the Universities of India and NIMS as the NIMS ambassador to India, and has made more than 5 MOU with Indian Universities. One of the interesting collaborations he made is with Prof. CNR Rao from JNCASR, Bangalore, India.

YOUNG SCIENTIST ISCB AWARD FOR -2010

IN THE AREA OF DRUG RESEARCH

Dr. Rawat has made a significant contribution and has developed novel farnesyl transferase inhibitors.

First time we have shown that introduction of bulky functional groups at 3, and 7 positions of farnesyl molecule, leads to a potent farnesyl transferase inhibitors (*J. Org. Chem.* 73, 1881, 2008; *ACS Chem. Biol.* 2, 385, 2007; *J. Biol. Chem.* 279, 41991, 2004; *Org. Letts.* 4, 3027, 2002). More recently we have started another project that deals with the synthesis of tetraoxane based antimalarials, a first project on this class of compounds in the country.



Dr. Diwan Singh Rawat,
Associate Professor,
Delhi University, Email:
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Our work proved that phenyl substituted tetraoxanes exhibits very good antimalarial activity (*Bioorg. Med. Chem. Lett.* 18, 1446, 2008) and we have developed a novel method for the synthesis of tetraoxanes (*Bioorg. Med. Chem. Lett.* 19, 1675, 2009; *Bioorg. Med. Chem.* 17, 5632, 2009; Indian Application No: 2103/DEL/2008).

Another area where we have made a significant progress is the development of antimicrobial agents with small molecule library (*Bioorg. Med. Chem. Lett.* 19, 1396, 2009; *Bioorg. Med. Chem. Lett.* 17, 4343, 2007; *J. Agric. Food Chem.* In Press, 2009). Dr. Rawat's research has been cited over 475 times.

No candidates were found suitable for the award in the area of Chemical and Biological Sciences