

ISCB AWARD FOR EXCELLENCE-2015

ISCB AWARD FOR EXCELLENCE-2015, IN THE AREA OF CHEMICAL SCIENCES

Professor Sandeep Verma, FASc, FNASc, FRSC

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Prof Verma currently serves as a Professor of Chemistry and Adjunct Professor of Biological Sciences and Bioengineering at Indian Institute of Technology Kanpur. He is also affiliated with DST Thematic Unit of Excellence on Soft Nanofabrication, Centre for Environmental Sciences and Engineering, and MHRD Centre for Excellence in Chemical Biology, at IIT Kanpur. His research interests are focused on metal-nucleobase interactions, bioinspired soft matter, and bionanoconjugate chemistry. He has guided 17 PhD students and trained many postdoctoral fellows and undergraduate students. He has published ~150 articles in reputed journals and as book chapters; serves as an Associate Editor of *Journal of Chemical Sciences* (Indian Academy of Sciences, Bangalore) and is on the Editorial Advisory Boards of *Chemical Communications*, *Chemistry & Biology*, *Journal of Peptide Science* and *Indian Journal of Chemistry, Section-A*. Prof Verma is also a member of the *Program Advisory Committee* of SERB (Organic Chemistry), Member, *Research Council*, CSIR-Institute of Himalayan Bioresource Technology, Palampur, Co-Chair, *NOST Council*, and India Chair, *Indo-German Frontiers of Engineering* (DST and Humboldt Foundation, Germany), to name a few professional responsibilities.

Significant honors:

1. Shanti Swarup Bhatnagar Prize in Chemical Sciences
2. J C Bose National Fellow
3. DAE-SRC Outstanding Investigator Award
4. *Fellow*, Indian Academy of Sciences and National Academy of Sciences, India
5. Ranbaxy Research Award in Pharmaceutical Sciences
6. DarshanRanganathan Memorial Lecture Award, Chemical Research Society of India
7. CDRI Award for Excellence in Drug Research
8. Swarnajayanti Fellowship in Chemical Sciences
9. OPPI Scientist Award, Organization of Pharmaceutical Producers of India
10. Prof R C Mehrotra Commemorative Lecture Award and Gold Medal, Indian Science Congress Association Centenary Session, Kolkata

Representative publications (last 5 years):

1. *J. Am. Chem. Soc.* **2009**, *131*, 13555-13562.,
2. *Chem. Commun.* **2010**, *46*, 3312-3314.
3. *Chem. Commun.* **2010**, *46*, 3890-3892. 4. *Chem. Commun.* **2010**, *46*, 4154-4156., 5. *Acc. Chem. Res.* **2010**, *43*, 79-91 (**Invited Review**)., 6. *Chem. -Eur. J.* **2011**, *17*, 6772-6780., 7. *Angew. Chem., Int. Ed.* **2011**, *50*, 9893-9897., 8. *Chimia* **2012**, *66*, 930-935 (**Invited Review**)., 9. *Mol. Pharmaceutics* **2013**, *10*, 3903-3912., 10. *ACS Appl. Mater. Interfaces* **2014**, *6*, 2185-2191., 11. *Chem. -Eur. J.* **2014**, *20*, 12262-12268., 12. *Chem. Commun.* **2014**, *50*, 15752 - 15755.

Total Citations: 2065; Average Citation: 11.22; H index: 25

ISCB AWARD FOR EXCELLENCE-2015, IN THE AREA OF BIOLOGICAL SCIENCES

Dr. Ute Schepers

Institute of Toxicology and Genetics,
Karlsruhe Institute of Technology (KIT) , Karlsruhe, Germany



Dr. Ute Schepers was born in Rhede, Germany, in 1966. After her studies in Chemistry at the University of Bonn, she received her PhD in 1997 working with Prof. Dr. Konrad Sandhoff. She then moved to Harvard Medical School for a post-doctorate (1998-2000) with Prof. Tom Kirchhausen at the Department of Cell Biology. In 2000 she returned to the Kekulé-Institute of Organic Chemistry and Biochemistry in Bonn to start her independent research. Since 2009 she became an independent group leader at the Institute of Toxicology and Genetics of the Karlsruhe Institute of Technology (KIT) in Karlsruhe, where she finished her habilitation in 2011. Her research is focused on combinatorial synthesis for the development of organ specific drug delivery systems for small molecules and siRNAs and reconstruction of 3D tissues for drug delivery tests. Recently she received the Innovation Award 2014 of the Neuland Fond for the melanoma specific transport.

PERSONAL DATA

Name: Priv. Doz. Dr. Ute, Sophia Schepers

Date of Birth: 8. Oktober 1966 in Rhede, Kreis Borken

Family Status: verheiratet mit Prof. Dr. Stefan Bräse, ein Sohn (Philipp 26.10.2010)

Address: Maarstr. 38
53842 Troisdorf

Institute: Institute of Toxicology and Genetics,
Karlsruhe Institute of Technology (KIT)
Campus Nord
Hermann von Helmholtz Platz 1
76344 Eggenstein-Leopoldshafen, Germany

ACADEMIC CAREER

2/2011	Habilitation at the Karlsruhe Institute of Technology (KIT) in Chemical Biology and Biochemistry
Seit 2/2009	Group Leader at the Institute of Toxicology and Genetics, KIT, Karlsruhe
2001-2008	Junior-Group Leader at the Institute of Organic Chemistry and Biochemistry, University of Bonn
1/1998-9/2000	Research Associate at the Department of Cell Biology and the Center for Blood Research of Harvard University Medical School Boston, USA in the group of Tom Kirchhausen
8/1996-12/1997	Postdoctoral fellow at the Institute of Organic Chemistry and Biochemistry, University of Bonn
1/1993-3/1997	PhD in Biochemistry in the group of Prof. Dr. K. Sandhoff at the Institute of Organic Chemistry and Biochemistry, University of Bonn
1-12/1992	Diploma in Chemistry in the group of Prof. Dr. K. Sandhoff at the Institute of Organic Chemistry and Biochemistry, University of Bonn
10/1986-12/91	Ungraduate studies of Chemistry PhD at the Institute of Organic Chemistry and Biochemistry, University of Bonn
1977-1986	Highschool Gymnasium zum Altenforst, Troisdorf, Topics: Mathematics and Physics

AWARDS

1993-1996	Fellowship of the Deutsche Forschungsgemeinschaft (DFG) in the Graduate Program „Functional Protein Domains“
2000	Gordon Research Foundation/ National Institute of Health (USA) Award on „Hormonal and Neuronal Peptide Biosynthesis“ research
2002	Bonner Forum Biomedizin Award 2002 for research on: RNAi of Glucosylceramide-Synthase: A Protein involved in Skin Barrier Formation
2002	Bonner Forum Biomedizin Award 2002 for research on: Synthesis of a new carrier-System for Transduction of siRNAs into Cells for Local Transient Posttranscriptional Gene Silencing in Living Organisms

- 2003 Bonner Forum Biomedizin Award 2003 for research on : Analysis of Skin Glycosphingolipid Metabolism by RNA Interference
- 2003 Bonner Forum Biomedizin Award 2003 for research on: Synthesis of a new carrier-System for Transduction of siRNAs into Cells for Local Transient Posttranscriptional Gene Silencing in Living Organisms
- 2004 Thieme Journal Award
- 2014 1. Preis Neuland Innovationspreis „Früherkennung maligner Melanomen“
- 2014 Elevator Pitch BW 1. Price (Regional Cup Karlsruhe)

INVITATIONS FOR OPEN PROFESSORSHIPS

- 1/2003 Universität Tübingen, Institut für Biochemie, C3- Nachfolge Weber
- 0-6/2003 Universität Frankfurt, Institut für Organische Chemie, Degussa Stiftungsprofessur (C3)
- 6/2010 KIT, Karlsruhe, Chemical Biology (W3)

ORIGINAL PAPERS

1. **Schepers, U.**, Glombitza, G., Lemm, T., Hoffmann, A., Chabas, A., Ozand, P., Sandhoff, K. (1996) Molecular analysis of a GM2 activator deficiency in two patients with GM2 gangliosidosis AB variant. *Am. J. Hum. Genet.* **59**:1048-1056
2. Sakuraba, H., Itoh, K., Shimmoto, M., Utsumi, K., Kase, R., Hashimoto, Y., Ozawa, T., Ohwada, Y. Imataka, G., Eguchi, M., Furukawa, T., **Schepers, U.**, Sandhoff, K. (1999) GM2 gangliosidosis AB variant - Clinical and biochemical studies of a Japanese patient. *Neurology.* **52**: 372-377
3. **Schepers, U.**, Lemm, T., Herzog, V., Sandhoff, K. (2000) Characterization of regulatory elements in the 5'-flanking region of the GM2 activator gene. *Biol. Chem.* **381**: 531-544

4. Wendeler, M., Lemm, T., Weisgerber, J., Hoernschemeyer, J., **Schepers, U.**, Sandhoff, K. (2003) GM2 activator: Recombinant Expression and Purification. *J. Prot. Expr. Pur.***27**:259-266
5. Diallo, M., Arenz, C., Schmitz, K., Sandhoff, K., **Schepers, U.** (2003) RNA Interference: A new method to analyze the function of glycoproteins and glycosylating proteins. Knockout experiments with UDP-glucose/ceramide glucosyltransferase as an example for its general application. *Methods in Enzymology.* **363**:173-190

ISCB YOUNG SCIENTIST AWARD FOR CHEMICAL SCIENCES-2015

Dr. Ram Awatar Maurya

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Division of Medicinal Chemistry and Pharmacology
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Ram Awatar Maurya did his B.Sc. (Chemistry) and M.Sc. (Organic Chemistry) at University of Lucknow, in the year 2002 and 2004, respectively. He completed his Ph.D. in 2009 at CSIR-Central Drug Research Institute, Lucknow, India. After a postdoctoral fellowship with Prof. Dong-Pyo Kim at Chungnam National University, Daejeon (2009-2012) and Pohang University of Science and Technology, Pohang (2012), South Korea, he joined CSIR-Indian Institute of Chemical Technology, Hyderabad, India in 2012 as DST-INSPIRE Faculty. His current research includes development of new reactions by using organic azides and diazo-compounds, continuous flow chemistry, and development of anticancer agents.

Dr. Maurya has authored 34 research papers in the peer-reviewed international journals in the area of synthetic organic chemistry, medicinal chemistry, and flow chemistry, and has three International and Indian patents to his credit. His research work has been widely recognised and highly cited in scientific community.

Total citation : 1044 (as on 08/01/2015)

Average citation : 30.7

H index : 20

Selected publications

RSC Advances, 2014, 4, 32303-32311; ***RSC Advances*** 2014, 4, **38425-38432**; ***Green Chemistry*** 2014, 16, 116-120; ***ACS Combinatorial Science*** 2014, 16, 466-477 (**Amongst the most read journal's top 20 article in 2014**); ***Tetrahedron*** 2014, 70, 4709-4717; ***Angew. Chem. Int. Ed.*** 2013, 52, 6735-6738 (**cover image article**); ***RSC Advances*** 2013, 3, 15600-15603; ***Angew. Chem. Int. Ed.*** 2013, 52, 7564-7568 (**cover image article**); ***Angew. Chem. Int. Ed.*** 2011, 50, 5952-5955 (**cover image article**); ***Lab on a Chip*** 2011, 11, 1941-1945; ***Lab on a Chip*** 2012, 12, 65-68.

ISCB YOUNG SCIENTIST AWARD IN THE AREA OF BIOLOGICAL SCIENCES-2015

Dr. Yasir Hasan Siddique

Aligarh Muslim University,

Aligarh, UP

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Dr. Siddique is working as an Assistant Professor in the Department of Zoology, AMU., Aligarh. He has studied the effects of synthetic steroids and anti-cancer drugs in mice, rats and in peripheral blood human lymphocytes (*in vitro*). The results have been published in the journals of International repute such as *Toxicology Letters*, *Toxicology in vitro*, *Chemico Biological Interactions*, *Human and Experimental Toxicology*, *Life Sciences*, *Journal of Natural Medicines*, *Food and Chemical Toxicology*, *Current Science*, *Drug and Chemical Toxicology*, *Natural Products Research*, *Experimental and Toxicologic Pathology*, *Fitoterapia*, *Mutation Research* etc.

At present he is working on *Drosophila melanogaster* as a model for studying the toxic effects of various nano-composites/ synthetic/naturally occurring compounds, the results of which have been published in the Journals of International repute such as *PLOS one*, *BioMed Research International* etc. He is also working on transgenic *Drosophila* model to study neurodegenerative diseases such as Parkinson's and Alzheimer's. The effect of various natural plant products/extracts have been studied on the transgenic *Drosophila* model and the results have been published in the Journal of International repute such as *Parkinson's Disease*, *International Journal of Neurosciences*, *Food and Chemical Toxicology*, *BioMed Research International*, *Journal of Dietary Supplements*, *Journal of Neuropathology and Experimental Neurology* etc.

Earlier he has been a recipient of eight awards at National level and has organized two National scientific events. He has authored 3 books in the field of Toxicology and Natural plant products. He has completed three major research projects and currently has three research grants from CSIR, DST and ICMR. Besides being a member of various scientific societies. He has also received the prestigious UGC-Faculty Research Award (2014) to carry out the research on Parkinson disease using *Drosophila* as a model.

Total citations: 897

Average citation: 7.5/paper

H index: 18

Selected Publications

1. **Siddique, Y.H.**, Ara, G., Beg, T., Afzal, M. (2010) Anticlastogenic effect of apigenin in human lymphocytes treated with ethinylestradiol. *Fitoterapia* 81:590-594.
2. **Siddique, Y.H.**, Beg, T., Ara, G., Gupta, J. and Afzal, M. (2010). Antigenotoxic effect of allicin against estradiol-17 β induced genotoxic damage in cultured mammalian cells. *Natural Products Research* 24 (12): 1087-1094.
3. **Siddique Y.H.**, Ara, G., Beg, T., Gupta, J., Afzal, M. (2010). Assessment of cell viability, lipid peroxidation and quantification of DNA fragmentation after the treatment of anticancerous drug Mitomycin C and curcumin in cultured human blood lymphocytes. *Experimental and Toxicologic Pathology* 62: 503-508.
4. **Siddique, Y.H.**, Ara, G., Beg, T., Afzal, M. and Faisal, M. (2012). Antigenotoxic effect of the *Plumbago zeylanica* extract against the genotoxic damage induced by potassium canrenoate in cultured human peripheral blood lymphocytes. *Drug and Chemical Toxicology* 35 (2)119-126.
5. **Siddique, Y.H.**, Ara, G. and Afzal, M. (2012). Effect of potassium canrenoate on hsp70 expression in transgenic *Drosophila melanogaster* (*hsp70-lacZ*)Bg⁹. *Journal of Insect Science*. Vol 12: Article 28 (online)
6. Khan, S., Jyoti, S., Naz, F., Shakya, B., Rahul, Afzal, M., **Siddique, Y.H.** (2012). Effect of L-ascorbic acid on the climbing ability and protein levels in the brain of *Drosophila* model of Parkinson's disease. *International Journal of Neurosciences* 122: 704-709.
7. **Siddique, Y.H.**, Mustajab, S.F., Jyoti, S., Naz, F. (2013). GC-MS analysis of Eucalyptus citriodora leaf extract and its role on the dietary supplementation in transgenic *Drosophila* model of Parkinson's disease. *Food and Chemical Toxicology* 55: 29-35.
8. **Siddique, Y.H.**, Fatima, A., Jyoti, S., Naz, F., Rahul, Khan, W., Singh, B.R., Naqvi, A.H. (2013). Evaluation of the toxic potential of graphene copper nanocomposite (GCNC) in the third instar larvae of transgenic *Drosophila melanogaster* (*hsp70-lacZ*)Bg⁹. *PLOSone* Volume 8 (12) e80944.
9. **Siddique, Y.H.**, Naz, F., Jyoti, S., (2014). Effect of curcumin on lifespan, activity pattern, oxidative stress and apoptosis in the brains of transgenic *Drosophila* model of Parkinson's disease. *BioMed Research International* vol. 2014, Article ID 606928, 6 pages, doi:10.1155/2014/606928.
10. Ali, F., Rahul, Naz, F., Jyoti, S., **Siddique, Y.H.** (2014). Protective effect of apigenin against N-nitrosodiethylamine (NDEA)-induced hepatotoxicity in albino rats. *Mutation Research* 767: 13–20.

- 11. Siddique, Y.H.,** Khan, W., Khanam, S., Jyoti, S., Naz, F., Rahul, Singh, B.R., Naqvi, A.H. (2014). Toxic potential of synthesized graphene zinc oxide nanocomposite (GZNC) in the third instar larvae of transgenic *Drosophila melanogaster* (*hsp70-lacZ*)Bg⁹. *BioMed Research International* Article ID 382124, 10 pages, 2014. doi:10.1155/2014/382124.
- 12.** Jyoti, S., Naz, F., Sachdev, R., Khan, S., Ali, F., Fatima, A., Khanam, S., **Siddique, Y.H.** (2014). Detection of aneuploidy and clastogenicity in buccal epithelial cells of pan masala and gutkha users by pan-centromeric FISH analysis. *Mutagenesis* 1-5.
- 13. Siddique, Y.H.,** Naz, F., Jyoti, S., Fatima, A., Khanam, S., Rahul., Ali, F., Mujtaba, S.F., Faisal, M. (2014). Effect of *Centella asiatica* leaf extract on the dietary supplementation in transgenic *Drosophila* model of Parkinson's disease. *Parkinson's Disease* 2014: 1-11.

ISCB AWARD OF APPRECIATION-2015, IN THE AREA OF CHEMICAL SCIENCES

Dr. Jibon Kotoky

Professor & Sectional In-Charge,
Biological and chemical sciences,
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Institute of Advanced study in Science and Technology (IASST),
(An autonomous R & D Institute under DST, Govt. of India)

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Prof. Kotoky obtained his Ph.D. Degree from Dibrugarh University under the joint guidance of (Late) Prof. Asima Chatterjee, FNA, FNASc., Padma Bibhushan, & former Khaira Professor & Dean of Faculty of Sciences, Calcutta University & Prof. K.K. Das., former HOD, Dept. of Chemistry, Dibrugarh University, Assam.

Did post-Doctoral study in Shanghai Second Medical University, Shanghai, China

Visited many Universities and delivered invited talks in several International conferences on various topics in Bulgaria, Greece, Canada and Germany.

Prof. Kotoky has Major research interests in the areas of:

- Natural products mainly on Bioprospecting
- Cancer Biology, specially Breast cancer, Prostate cancer and diabetes and its complications like diabetes neuropathy using Synthetic/Semi-synthetic compounds taking the lead from Natural sources.
- Antifungal (anti-dermatophytic), anti-bacterial drug development for resistant strains and their pharmacological & pharmaceutical evaluation with the help of *in-vitro* and *in-vivo* techniques.
- Molecular pharmacological techniques for nano-particulate drug delivery system

Published more than 85 research articles in reputed International journals and have filed 5 patents.

Have delivered more than 35 lectures in various International and National conferences.

Reviewer of several International and National Journals.