

Concord

Newsletter of Indian JSPS Alumni Association (IJAA)



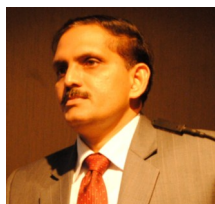
International Conference on “Frontiers in Energy, Environment, Health and Materials Research (EEMR - 2013)” and 4th IJAA meeting



Inside this issue:

Message from Chairman IJAA	2
Message from Dr. Chadaram Sivaji, Counselor for Science and Technology, Embassy of India, Tokyo	2
Message from Mr. Takeshi Kamei, Head, Overseas Fellowship Division, JSPS	2
From the Editorial Board...	2
EEMR-2013 a grand success	3
Low cost alternatives are required to meet energy demand - Prof. Sumio Iijima	3
JSPS will promote exchange of Indian and Japanese researchers—Mr. Takeshi Kamei	4
EEMR-a perfect blend of Indian and Japanese researchers	5
Prof. Iijima felicitated by IJAA South Chapter	6
Prof. Sakthi is the resource person for all JSPS Alumni Associations	6
New executive committee for 2013-2017	7
Scientific contributions of IJAA members (in 2013)	8
Our Bridge Fellows	9
IJAA-Toyohashi University Special Fellowship	9
Achievements	10

Message from Chairman, IJAA



our new editorial board is coming

Dear Indian JSPS Alumni members, I am really happy that our new editorial board is coming up with next issue of our Newsletter "Concord" as our 2013 Bhubaneswar seminar issue. I am sure that our new editorial team headed by Dr. R. S. Rajeev as the Chief Editor, and the sub editors Dr. Tadisetty and Dr. Bhuvan will defi-

nately take our newsletter to next level by their creative minds.

I request all our members to provide articles and information to our editorial board, which you think beneficial to our alumni

members.

My best wishes are always with our editorial team!!!!

Yours

Sakthi Kumar

Message from Dr. Chadaram Sivaji— Counselor for Science and Technology Embassy of India, Tokyo



and information sharing among Indian and Japanese S&T Ecosystems. The IJSPSAA is actively pursuing to build more effective partnerships between Indian and Japanese scientists through its annual meetings held in India. I noticed that these meetings are attended by eminent scientists from both sides to discuss on

I am delighted to know that IJSPSAA Association is bringing out a newsletter on its activities their collaborative subjects. Last year the association has organized India Japan seminar to commemorate the 60 years of diplomatic relationships between two countries. The IJSPSAA under the active Chairmanship of Prof. Sakthi Kumar would go a long way in building bridges between India and Japan in the field of science and technology. I wish the newsletter will contribute towards more information exchanges between scientists, students and policy makers.

Message from Mr. Takeshi Kamei, Head, Overseas Fellowship Division, JSPS



I appreciated all the attendees, including the outstanding scientists from Japan and India, for setting aside time to participate in this event and use it as an opportunity to strengthen scientific collaboration between our two countries.

When I was preparing for this symposium at my office in Tokyo, I felt that IJAA must be a

very energetic association. In attending the symposium, I found that my expectation couldn't have been more correct. The achievement of such a well-balanced symposium owes much to the volume of its attendance and quality of its program. I was happy to see the attendees taking initiative and enjoying their participation in it. The chair and executive other members did a superb job of planning, preparing and conducting the symposium. I was also thrilled to see younger researchers and students lending their support and attending the poster

Contd. in Page 6

From the Editorial Board...

With great pleasure and satisfaction we are releasing the fourth volume of Concord, after a gap of more than three years. Concord is a passion for all IJAA members. However, due to preoccupations of the members, it could not be published regularly though it cannot be considered as an excuse. The fourth issue is a humble attempt to revive Concord, to make it regular and more frequent. We are sure that with the support of all IJAA members it is not a difficult task.

This time, more emphasis is given to the recently concluded EEMR-2013 and fourth IJAA meeting at Bhubaneswar as it was a memorable event for all delegates. We have attempted to cover the event as much as possible. This issue also covers the activities of regional chapters of the association and details about the new Executive Committee.

What we need to plan now is to make Concord a regular news-

letter. We welcome any form of creativity from our members—be it research article, poem, photograph, painting, what not. We urge all our members to actively contribute to Concord. The career achievements, publications, research findings etc. of the members can be communicated to us so that all such information will find a place in Concord. This way, we can enrich Concord, which will eventually become a souvenir

of our activities in future. We are sure that this will not be a difficult task for us because we are the ones who made IJAA the most vibrant and active Alumni Association of JSPS. Let Concord be the most popular newsletter among all JSPS Alumni Associations!

*-For Editorial Committee,
Rajeev, Bhuvaneshwaran and
Srinivasulu Tadisetty*

Concord

Newsletter of Indian JSPS Alumni Association (IJAA)



EEMR-2013 a grand success

News at glance

- 4th meeting of IJAA held at CSIR-IMMT Bhubaneswar during August 12-13, 2013.
- New Executive Committee members for 2013-2017 selected. Reorganization of Chapter Committees also underway.
- Next IJAA meeting is proposed at North Chapter. Venue will be decided soon.
- Toyo University opened its office in IIT Delhi.
- Prof. Iijima felicitated by IJAA South Chapter.
- 2013 Bridge Fellowships announced.

The recently concluded International Conference on "Frontiers in Energy, Environment, Health and Materials Research (EEMR - 2013)" during August 12-13, 2013, at CSIR-IMMT, Bhubaneswar, India will be remembered as one of the best conferences organized by Indian JSPS Alumni Association (IJAA). The conference was organized by IJAA in collaboration with JSPS, CSIR and IMMT-Bhubaneswar. All the delegates praised the warmth hospitality of the local organizing committee and the well structured sessions where talks were delivered by eminent scientists from both Japan and India.

In his inaugural address, Prof. Madhusudan Chakraborty, Director, Indian Institute of Technology,

Bhubaneswar, lauded the organizers for bringing up energy, environment, health and materials research as the focal theme of the Conference which are the most important concerns of the 21st century and are inter-related too. Novel materials are required for addressing the challenges ahead for creating better, cleaner and healthier environment through proper management of energy. He wished that by the active and fruitful interaction of Indian and Japanese researchers through the seminars organized by IJAA, both India and Japan will be well-prepared for facing any challenge in energy, environment, health and materials.

Earlier, in his welcome address, Prof. B. K. Mishra, Director, IMMT,



Prof. Madhusudan Chakraborty delivering the inaugural address

Bhubaneswar stressed the necessity of networking in scientific research and pointed out that the platform provided by IJAA and JSPS through such Conferences is ideal for collaboration and interaction. In his

Contd. in Page 4

Low cost alternatives are required to meet energy demand - Prof. Sumio Iijima



Prof. Iijima talks on carbon nanomaterials

Prof. Sumio Iijima, well known for his original contributions towards the research on carbon nanotubes, mentioned that in order to meet the growing demands of energy, low cost alternatives are required. He was delivering the key note address in the recently concluded National Conference on Frontiers in Energy, Environment, Health and Materials Re-

search (EEMR - 2013)". Prof. Iijima gave a detailed description on the various aspects of research on carbon nanomaterials including carbon nanotube and carbon nanohorns. According to him, carbon nanohorns are a potential material for energy devices, drug delivery system and others. In order to tap the potential of such nanomaterials, research is re-

quired to produce them in abundance meeting the quality requirements. He also touched upon various characterization methods of carbon nanomaterials such as TEM, EELS and Raman Spectroscopy. He stressed the need for finding out the applications of these nanomaterials for the benefit of the society to exploit their right potential. ■

EEMR-2013...(contd. from Page 3)



A view of the audience

The Conference was attended by more than 180 participants from both India and Japan including researchers from IITs, NITs and various other research laboratories both in India and Japan

opening remarks, Prof. (Dr.) Sakthi Kumar highlighted the activities of IJAA in promoting scientific collaboration between India and Japan. He informed that a series of Seminars and Conferences have been organized by the Association in the past and even the talk delivered by Prime Minister Manmohan Singh, when he visited Japan, mentioned the Indo-Japan research collaboration. He thanked the JSPS and the Japanese delegates for their continuing support for the Conference.

Mr. Takeshi Kamei, Head Overseas Fellowship Division, JSPS Headquarters lauded the efforts of the IJAA in organizing such conferences in a series and commented that IJAA is one of the most active and vibrant alumni associations of JSPS. He extended all possible supports of JSPS for IJAA in future also. In his speech, Mr. Shinchi Higuchi, First Secretary, Science and Technology, Japan Embassy, India, wished success for the conference. He expressed happiness that the IJAA seminars have become an

important platform for exchange of ideas between Indian and Japanese researchers. Dr. Bimal P. Singh, Organizing Secretary delivered vote of thanks.

The Conference was attended by more than 180 participants from both India and Japan including researchers from IITs, NITs and various other research laboratories all over India and Japan. A poster session was also arranged where around 70 posters were displayed both by IJAA members and other researchers.

JSPS will promote exchange of Indian and Japanese researchers—Mr. Takeshi Kamei



Panel discussion

The panel discussion exchanged ideas among panel members and delegates regarding promotion of research, the research objectives for the future and the energy issues and solutions for a better future.

JSPS will help in promoting exchange of more researchers between India and Japan, said Mr. Takeshi Kamei, Head, Overseas Fellowship Division, JSPS Headquarters, during the panel discussion in the recently concluded IJAA Seminar. He expressed happiness over the increased number of participants from both India and Japan during the Conference.

The panel discussion exchanged ideas among panel members and delegates regarding promotion of research, the research objectives for the future and the energy issues and solutions for a better future. Prof. B.K. Misra, Director, IMMT Bhubaneswar, called upon the need to create a research hub in India where the research objectives of the country for the immediate future can be formulated and a

focused research to solve the energy crisis can be initiated. Prof. Harinarayan, Director, GER-MI, Gandhinagar cautioned that there is acute shortage of energy in the country and the next revolution in India, after green and white revolutions will be energy revolution.

Prof. Iijima forecasted big future for Indian research and complimented the way by which research and research institutions in India are progressing. He predicted that brilliant youngsters will contribute a lot in the longer term. He also pointed out that there are a large number of lady scientists in India whereas in Japan, their numbers are less. Dr. Yoshio Sakka, Director, Nano Ceramic Research Centre, NIMS commented that while foreign students in Japan show great interest in pursuing PhD programmes, Japanese students are

not showing the same level of interest. He appreciated the hardworking of Indian students which will help them in acquiring better knowledge and leading positions in future. He also talked about the academic system in NIMS. Dr. Masayuki Takeuchi of NIMS put forward the idea of initiating a smart city project where through research on energy, water purification etc., a smart city can be created. He complimented the organizers for selecting such an excellent theme for this year's Conference.

Prof. Toru Maekawa, Director, Bio-nano Electronics Research Centre, Toyo University, Japan told that Japanese are coping up with the aftermaths of Fukushima disaster and are now focusing more on spiritual aspects rather than materials.

Contd. in Page 5

Panel discussion...(contd. from Page 4)

He made the comment that Indian traffic system is very sophisticated and appreciated its chaotic nature. He also told that the youngsters in India are promising which will benefit the nation in the future. Mr. Shinchi Higuchi, First Secretary, Science and Technology, Japan Embassy-India lauded the initiative of Indian scientists taking up social problems. He exhorted the need for both human and research exchange programmes between India and Japan.

Prof. D. Sakthi Kumar, Chairman, IJAA expressed happiness over the presence of many students in the Conference and informed the

audience that one of the major objectives of IJAA Conferences is to give information to Indian students on research opportunities in Japan. That is why the Seminars are conducted in different locations to widen the outreach. Japan is actively searching for Indian students who can contribute to Japanese research and at the same time getting benefited to avail world class research facilities in Japan. He pointed out the need for grass-root level interaction is required for getting opportunities in Japan. Now-a-days, many Japanese universities are conducting courses in English so that language needs not be a

barrier. He appreciated the number of Japanese University booths in Conference which will help Indian students to secure academic positions in Japan. He urged all the IJAA members to disseminate information on research opportunities in Japan to their friends and colleagues.

In his concluding remarks, Dr. Bimal P. Singh, Organizing Secretary, EEMR-2013 thanked all the delegates for their active participation and contribution to make the Conference a grand success. Delegates also thanked Dr. Singh for organizing such a wonderful Conference.



Prof. Iijima is inaugurating the poster session

"Prof. Sakthi Kumar, expressed happiness over the presence of many students in the Conference"

EEMR-2013, an ideal meeting place for Indian and Japanese researchers

IJAA was instrumental this time too to make a perfect blend of Indian and Japanese researchers in its annual alumni meet. Association itself is raising the bar for the quality of the meeting each time. In EEMR at Bhubaneswar, a host of leading Indian and Japanese researchers presented their research ideas and interacted with the students, delegates and IJAA members. The keynote address was given by Prof. Sumio Iijima, world famous for the research on carbon nanotube, Dr. Mimoru Takahashi, President, Nagoya Institute of Technology and Dr. G. Sundararajan, Director, ARCI Hyderabad. Prof. Toru Maekawa, Director, Bio-nano Research Centre, Toyo University, Dr. Yoshio Sakka, Director, Nanoceramic Research Centre, NIMS, Prof. Harinarayan, Direc-

tor, GERMI, Gandhinagar, and Dr. Masayuki Takeuchi, NIMS were given the plenary talks. Invited talks included those by Prof. T. Pradeep, DST Unit of Nanoscience, IIT, Madras, Prof. B.K. Mishra, Director, IMMT, Bhubaneswar, Dr. Tetsuo Uchikoshi, NIMS and Prof. Noriyuki Dokyu, Toyo University.

One of the major attractions of the Conference was the booths by Japanese universities. Similar to previous years, this time too, a large number of Japanese universities, including Tokyo University, Toyo University, Nagoya Institute of Technology, NIMS etc. put their booths and give information regarding their academic facilities to the students and delegates. Tokyo University, Toyo University and Ritsumeikan University were introduced by their representa-

tives. A new feature of this year's Conference was the introduction of Japanese companies. JEOL, Hitachi, Shimadzu and Horiba were given introduction during the Conference. Odissi Dance, as part of the cultural programme, was a feast to the eyes for the delegates.



Booth of Japanese Universities



Booth of Japanese Companies



Booth of Japanese Universities



Cultural Programme



Prof. Iijima delivering a talk at SCTIMST, Thiruvananthapuram.

Prof. Iijima felicitated by IJAA South Chapter

It was a moment of joy and pride for IJAA South Chapter when Prof. Sumio Iijima, who was on a short trip to India, accepted their invitation for a felicitation and talk at Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST), Thiruvananthapuram, Kerala on 4th March 2013.

On behalf of Indian JSPS Alum-

ni Association (South Chapter) Dr. C. P. Sharma, Head, Bio-medical Technology Wing felicitated Prof. Sumio Iijima by offering the traditional Ponnada. Later Prof. Iijima delivered his lecture on Carbon Nanotubes and thereafter interacted with students and scientists of various disciplines. Dr. P.V. Mohanan, Chairman, IJAA (South Chapter), Dr. Annie John, Dr.



Prof. Iijima with IJAA South Chapter members at SCTIMST, Thiruvananthapuram.

Maya Nandakumar and Dr. HK. Varma spoke on the occasion.



Prof. Sakthi is introducing JSPS Alumni Associations to new JSPS fellows.

IJAA can be proud that Chairman, Prof. Sakthi Kumar is the resource person for introducing the activities of all JSPS Alumni Associations world over to the new JSPS fellows. Prof. Sakthi's responsibilities in-

Prof. Sakthi is the resource person for all JSPS Alumni Associations

clude providing information regarding the activities of all the JSPS Alumni Associations to the new JSPS fellows, 7-8 times every year. Prof. Sakthi will encourage the JSPS fellows to join their respective Alumni Associations once their fellowship in Japan is over. He will also assist in starting new associations. It is a recognition for IJAA too by JSPS by selecting Prof. Sakthi for this coveted job.

Prof. Sakthi Kumar is working as Co Director (International Affairs) in Bio Nano Electronics Research Centre and Professor of Graduate School of Interdisciplinary New Science, Toyo University, Japan. He worked as JSPS post doctoral fellow in Toyo University (2001-2003). He is having 7 patents wrote 4 book chapters and published 92 research papers in International Journals and gave many invited talks in international



Prof. Sakthi is interacting with new JSPS fellows.

seminars. He has received Asian Excellence Award (2012) from Society of polymer science, Japan. He has produced 13 Ph. D.'s till now.

Message from Mr. Takeshi Kamei ...(contd. from Page 2)

session. They asked many questions and offered comments to the Japanese lecturers. They even gave me briefings on their activities in ways that bridged my lack of knowledge on their specific research fields. I was impressed by the attendance of IJAA family members, who added an intimate dimension to the atmosphere of the cultural program. I noticed that all the IJAA members look forward to and enjoy these annual assemblies. I join them in looking forward to next year's high-level event.

After returning to Japan from the

symposium, I participated in an orientation session for the newly arriving overseas researchers under JSPS's post-doctoral fellowship program. In the past, I'm sure that readers of Concord have attended this orientation. This time, I saw many Indian participants enjoying it. They appeared excited when talking with Dr. Sakthi Kumar, who gave a presentation on JSPS alumni program as a representative of all the alumni associations. I was really pleased to see Indian researchers of various genera-

tions being so closely associated with Japan. At the reception following the orientation, the Indian fellows got together and discussed their research, careers and life in both Japan and India.

From these things I witnessed and experienced, I am certain that academic collaboration and networking between India and Japan will continue to grow and thrive. I would like to ask the Indian alumni members to take advantage of what you learned from your experience in Japan to create an ever-more vibrant re-

search environment in your home country while raising up the next generation of young researchers. As head of JSPS's Fellows Plaza and Overseas Fellowship Division, I pledge the support of my young staff in advancing continuous collaboration between Indian researchers and your Japanese colleagues.

New executive committee for 2013-2017

The new Executive Committee for 2013-2017 was selected during the Bhubaneswar Conference. Following are the Executive Committee members:

Chairman - Prof. D. Sakthi Kumar

Vice Chairman - Dr. Pravin D. Kunte

General Secretary - Dr. P.V. Mohanan

Joint Secretaries - (1) Dr. Annie John (2) Dr. Bimal P. Singh

Treasurer - Dr. Kailash Manda

Chief Editor - Dr. R. S. Rajeev

Sub Editors - (1) Dr. Bhuvaneshwaran (2) Dr. Srinivasulu Tadisetty

Conveners (1) - Dr. Kamini Numbi (From South Chapter) (2) - Dr. Sanjay Dhakate (From North Chapter) (3) - Dr. Rajesh Biniwale (From West Chapter) (4) - Dr. R.N. Basu (From East Chapter)

North Chapter - To be constituted - Discussion is going on...

(No consensus emerged during the meeting - Referred for further discussion under Dr. Sanjay Dhakate - Former Chairman North Chapter)

West Chapter - To be constituted - Discussion is going on... (No consensus emerged during the meeting - Referred for further discussion under Dr. Rajesh Biniwale - Former Gen. Sec. West Chapter)

South Chapter - Chairman - Dr. C. Gurumoorthy

Gen. Sec. - Dr. Maya Nandakumar

Convener (1) - Dr. T. V. C. Sharma (2) - Dr. Darshan

East Chapter - Chairman - Dr. Sankar Bose

Gen Secretary - Prof. Chacko Jacob

Convener (1) - Dr. Utpal Borah (2) - Dr. Alakananda Hajra

Some of the major decisions taken by the Association during the General Body Meeting are:

1. Registration of IJAA in India. General Secretary started the process.

2. Membership fees: Rs. 5000 (Life membership) by all members and an additional Rs. 10,000 from Bridge Fellows.

3. Part of the membership fee will be used to support members' travel to attend the seminar (about 50%). Executive members also will get only 50% of support. Accommodation will be provided to all members including executive members in guest houses.

4. The money which main executive committee is providing to the chapter for the support of members travel should be reimbursed from the fund generated by the local committee after each seminar to enable the executive committee to provide the same fund to the next chapter for the consecutive year.



Prof. D. Sakthi Kumar



Dr. Pravin D Kunte



Dr. P.V. Mohanan



Dr. Annie John



Dr. Bimal P Singh



Dr. Kailash Manda



Dr. R.S. Rajeev



Dr. R.S. Bhuvaneshwaran



Dr. Srinivasulu Tadisetty



Dr. Kamini Numbi



Dr. Rajesh Biniwale



Dr. Sanjay Dhakate



Dr. R.N. Basu

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IJAA seminar news in JSPS Quarterly

Indian JSPS Alumni Association Holds Celebrative Symposium in Japan

On 7-8 December, the Indian JSPS Alumni Association (IJAA) teamed up with Bio-Nano Electronics Research Centre (BNERC) of Toyo University to hold a symposium to celebrate the 60th anniversary of the establishment of diplomatic relations between Japan and India. As the venue for the event, Toyo University provided its Inoue Enryō Memorial Hall, accommodating some 400 people from the two countries over the symposium's two days. Having been organized as a sequel to IJAA's third Annual Symposium, held in Nagpur City, Maharashtra State, the symposium was themed "Advanced Science and Technology." In its opening ceremony, JSPS executive director Mr. Hayashi Towatari and Ms. Deepa Gopalan Wadhwani, Ambassador, Embassy of India, Japan, offered remarks, followed by a keynote address from Dr. Makoto Kobayashi, 2008 Nobel laureate in physics, and Dr. R. Chidambaram, principal scientific advisor to the Government of India. Altogether, four keynote addresses and 15 lectures were delivered. The participants listened to them with piqued interest. In parallel with the symposium, young researchers carried out



poster session. Standing in front of their displays they energetically fielded questions from the participants.

Closing remarks were delivered by IJAA chair and BNERC professor Dr. D. Sakthi Kumar and University of Kerala vice chancellor Dr. A. Jayakrishnan. Adding comments to their remarks, the participating researchers jelled together in a way that testified to the strong value they place on Indo-Japanese exchange.

— Overseas Fellowship Division

Reproduction of the article published in JSPS Quarterly on the IJAA seminar held in Tokyo, organized in collaboration with Bio-Nano Electronics Research Centre (BNERC) of Toyo University to celebrate the 60th anniversary of establishment of diplomatic relations between India and Japan



JSPS office bearers Mr. Takeshi KAMEI (Head, Overseas Fellowship Division,) Ms. Mariko MIKAMI (Staff Member, Overseas Fellowship Division) Ms. Rui SAKURAI (International Program Associate, Overseas Fellowship Division)



"We welcome all the achievements and contributions made by our members to publish in Concord. Please inform us from time to time"



Scientific contributions of IJAA members (in 2013)

Dr. R.S.Bhuvaneswari

1. D. Vydeki and **R. S. Bhuvaneswari**, "Effect of clustering in designing a fuzzy based hybrid intrusion detection system for mobile ad hoc networks", Journal Computer Science, Apr 2013, Vol 9(4), pp 521-528

2. I. Shatheesh Sam, P. Devaraj and **R. S. Bhuvaneswari**, "An intertwining chaotic maps based image encryption scheme", International Journal on Nonlinear Dynamics, Springer Publications, Vol. 69, issue 2, 2012, pp 1995-2007

3. Vydeki Dharmar, Ayisha Razeena Parveen, M.A. **Bhuvaneswari**, **R.S.** "Blackhole Detection in Ad hoc Networks using Neural Networks", Journal of Innovation in Computer Science and Engineering, Vol. 2(1), pp 29-33, 2012.

4. Soundararajan, S. and **Bhuvaneswari**, **R.S.** "Ant Based Multi-path Routing for Load Balancing and Congestion Control in MANET", Journal of Information and Computational Science, vol.9, no.12, pp.3365-3377, 2012.

Dr. Utpal Bora:

1. A. Gogoi, G. Sarmah, A. Dewan, **U. Bora**, "Unique copper salen complex: An efficient catalyst for N-arylations of anilines and imidazoles at room temperature", Tetrahedron Letters, 2013

2. G. Borah, D. Boruah, G. Sarmah, S. K Bharadwaj, **U. Bora**, "The Development of Phosphinoamine-Pd (II)-Imidazole complexes: Implication in room temperature Suzuki-Miyaura cross-coupling reaction", Applied Organometallic

Chemistry 2013

3. M. Mondal and **U. Bora**, "Recent advances in manganese(III) acetate mediated organic synthesis", RSC Adv., 2013, 3, 18716.

4. A. Gogoi, **U. Bora**, "A mild and efficient protocol for the ipso-hydroxylation of arylboronic acids", Tetrahedron Letters 2013, 1821.

Dr. C.D. Madhusoodana

1. A.Bharatish, H.N.Narasimha Murthy, B.Anand, **C.D. Madhusoodana**, S. Praveena, M.Krishna, "Characterization of hole circularity and heat affected zone in pulsed CO₂ laser drilling of alumina ceramics", Optics & Laser Technology 53 (2013)22-32

2. R. Srikanth, Suggala. V. Satyanarayana and **C. D. Madhusoodana**, "Gas separation through ceramic supported polymeric membranes: mathematical modeling", International Journal of Chemical Engineering, IJCE: 5(2) (2012):117-129

3. "Ceramic supported composite membranes of hydroxyl ethyl loaded with Al-MCM41 for CO₂ separation" Oral paper no OA 33 Euromembrane 2012 during Sept 23-27th 2012 at London

Dr. C.Gurumoorthy

1. **Gurumoorthy C.** and Kusakabe O., (2012), "Experimental methodology to assess migration of iodide ion through Bentonite-Sand Backfill in a Near

Surface Disposal Facility", Indian Journal of Science and Technology, Vol.5 No.1(Jan 2012)ISSN:0974-6846, pp1834-1839

2. **C. Gurumoorthy**, C. Anandan (2012), "Development of RS-GIS based spatial database and soil moisture & soil temperature data for the required timeframe towards Round Robin Exercise for Atmospheric Flow Field simulation and validation at Kalpakkam region for Air borne dispersion studies" (2012), Part of BRNS sponsored project Phase I Round Robin Exercise on Atmospheric Flow field modeling at Kalpakkam, RSD/IGCAR Report, 15, pp 115~119.

Dr. R.Bhatta

1. **R Bhatta**, M. Saravanan, L. Baruah, K. T. Sampath and C S Prasad (2013), "In vitro fermentation profile and methane reduction in ruminal cultures containing secondary plant compounds" Journal of Applied Microbiology, 115, 455-465

2. **R Bhatta**, L. Baruah, M. Saravanan, K. P. Suresh and K. T. Sampath (2013), "Effect of tannins from medicinal and aromatic plants on rumen fermentation, protozoa population and methanogenesis in vitro", Journal of Animal Physiology and Animal Nutrition. 97(3) 446-456

3. **R. Bhatta**, O. Enishi, Y. Yabumoto, I. Nonaka, N. Takusari, K. Higuchi, K. Tajima, A. Takenaka and M. Kurihara (2013), "Methane reduction and ener-

Scientific contributions ...(contd. from Page 8)

gy partitioning in goats fed two concentrations of tannin from *Mimosa spp*", *Journal of Agricultural Science (Cambridge)*. 151: 119-128

4. **R Bhatta**, M. Saravanan, L. Baruah and K. T. Sampath (2012), "Nutrient content, in vitro ruminal fermentation characteristics and methane reduction potential of tropical tannin-containing leaves" *Journal of the Science of Food and Agriculture*. 92:2929-2935

5. **R Bhatta**, M. Saravanan, L. Baruah and K. T. Sampath (2012). Phenolic composition, fermentation profile, protozoa population and methane production from sheanut (*Butyrospermum parkii*) by-products in vitro. *Asian Australasian Journal of Animal Sciences*, 25(10): 1389-1394

Dr. Manickam Sivakumar

1. Asgar Ali, Noosheen Zahid, **Manickam Sivakumar**, Siddiqui Yasmeen, Peter G. Alderson and M. Maqbool, *Postharvest Biology and Technology*, 86, 147-153, 2013.

2. Siah Ying Tang, Shridharan Parthasarathy and **Manickam Sivakumar**, "Impact of Process Parameters in the Generation of Novel Aspirin Nanoemulsions – Comparative studies between Ultrasound Cavitation and Microfluidiser", *Ultrasonics Sonochemistry*, 20(1), 485-497, 2013.

3. Siah Ying Tang and **Sivakumar Manickam**, "A Novel

and Facile Liquid Whistle Hydrodynamic Cavitation Reactor to Produce Submicron Multiple Emulsions", *American Institute of Chemical Engineering Journal (AIChEJ)*, 59(1), 155-167, 2013.

4. Chee Meng Ng and Manickam Sivakumar, "Improved Functionalisation and Recovery of Carboxylated Carbon Nanotubes using the Acoustic Cavitation approach", *Chemical Physics Letters*, 557, 97-101, 2013.

5. Siah Ying Tang, **Manickam Sivakumar** and Nashiru Billa, "Impact of Osmotic Pressure and Gelling in the generation of highly stable Single Core Water-in-Oil-in-Water (W/O/W) Nano Multiple Emulsions of Aspirin assisted by Two-stage Ultrasonic Cavitation", *Colloids and Surfaces B: Biointerfaces*, 102, 653-658, 2013.

6. Hanif A. Choudhury, Amit Choudhary, **Manickam Sivakumar** and Vijayanand Moholkar, "Mechanistic investigation in Sonochemical synthesis of Zinc Ferrite", *Ultrasonics Sonochemistry*, 20(1), 294-302, 2013.

7. X. W. Ang, V. S. Sethu, J. M. Andresen and **M. Sivakumar**, "Copper (II) ion removal from aqueous solutions using biosorption technology – Thermodynamic and SEM-EDX studies", *Clean Technologies and Environmental Policy*, 15, 401-407, 2013.

8. Lay Hong Chuah, Clive Roberts, Jonathan Burley, Manick-

am Sivakumar and Nashiru Billa, "Curcumin-containing Chitosan nanoparticles as a potential Mucoadhesive delivery system to the colon", *Pharmaceutical Development & Technology*, 2013, May-June, 18(3), 591-9.

Dr. Jayashankar De.

1. Gursharan Singh, S. Sevinç Şengör, Aditya Bhalla, Sudhir Kumar, **Jaysankar De**, Brandy Stewart, Nicolas Spycher, Timothy M. Ginn, Brent M. Peyton and Rajesh K. Sani, "Reoxidation of biogenic reduced Uranium - a challenge towards bioremediation", *Critical Reviews in Environmental Science and Technology*. DOI: 10.1080/10643389.2012.728522. 2013. IF=4.84.

2. **De Jaysankar**, "Potential of marine bacteria in enhanced bioremediation", *Proceedings of the International Conference on Oceanography & Natural Disasters*. August 21-23, 2013; Orlando-Florida, USA. *Journal of Marine Science: Research & Development*. Vol. 3, Issue 3. p. 95. 2013.



IJAA-Toyohashi University Special Fellowship

Prof. Prem Bisht, Department of Physics, Indian Institute of Technology, Madras has been awarded the Special Fellowship provided to IJAA by Electronics-Inspired Interdisciplinary Research Institute, Toyohashi University of Technology, Aichi, Japan in 2012. Congratulations, Prof. Bisht.

(To know more about such fellowships, please contact IJAA secretariat)

Our Bridge Fellows

2013

Dr. Divya Prakash, Banaras Hindu University, Uttar Pradesh.

Dr. Utpal Bora - Indian Institute of Technology Guwahati. Assam

Dr. Annie John - Sree Chitra Tirunal Institute for Medical Sciences and Technology, Thiruvananthapuram, Kerala.

2012

Dr. P. V. Mohanan – Sree Chitra Research Institute for Medical Sciences and Technology, Thiruvananthapuram, Kerala.

Dr. Bhushan Choudhury- North Maharashtra University, Maharashtra.

Dr. Bimal P. Singh – CSIR Institute, Bhubaneswar, Orissa.

2011

Dr. Sanjay Dhakate – NPL, New Delhi

Dr. Srinivaslu Tadisetty- VCE, Hyderabad, Andhra Pradesh

Dr. Sanjib K. Panda – Utkal University, Orissa.

2010

Dr. Dilip Kumar Chand – Indian Institute of Technology, Madras, Tamil Nadu

Dr. Rajesh Biniwale – NEERI, Nagpur, Maharashtra.

Dr. Tharmalingam Punniyamoorthy- IIT Guwahati

2009

Dr. Thomas Kurian, CUSAT, Cochin, Kerala.

Dr. Kamini Numbi, CLRI, Chennai, Tamil Nadu

Achievements of our members

IJAA congratulates all our members for their splendid achievements last year.

Indian JSPS Alumni Association

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Dr. R.S. Bhuvaneshwaran and Dr.
Srinivasulu Tadisetty (Sub Editors).

Chairman's address

Prof. D. Sakthi Kumar
(Chairman, Indian JSPS Alumni Association)
Bio Nano Electronics Research Center
Dept. of Applied Chemistry
TOYO University
Kawagoe-Shi, Saitama, JAPAN - 350-8585

Dr. C.D. Madhusoodana
received GN Agrawal Me-
morial award from Indian
Ceramic Society for life
time achievement in Glass
& Ceramics.

Dr. C. Gurumoorthy is ap-
pointed as the Visiting Fac-
ulty-as an International
Expert in Nuclear Energy as
part of the Human Re-
sources Development Ini-
tiative at Ibaraki National
College of Technology,
Ibaraki, Japan Since Janu-
ary 2013.

Dr. C.D. Madhusoodana
Elected as Vice Chairman,

Indian Ceramic Society ,
Bangalore Chapter and Hon-
orary Joint Secretary Indian
Ceramic Society, Kolkata

Dr. Jayashankar De is ap-
pointed as the Head, Dept.
of Biotechnology, UNESCO
Chair-LSIPEC, Armenia.

Dr. PV. Mohanan is nominat-
ed as a Visiting Professor of
the Graduate School of Inter-
disciplinary New Science,
Toyo University from 2013
April onwards.

Dr. PV. Mohanan is nominat-
ed as a Visiting Researcher
at the BioNano Electronics
Research Station, Toyo Uni-
versity from 2013 onwards.



IJAA Joint Secretary, Prof. Dr. Annie John,
Scientist-F, BMT Wing, Sree Chitra Tirunal
Institute for Medical Sciences and Technol-
ogy (SCTIMST), Trivandrum, receiving the
"ICMR Kshanika Oration Award - 2010"
from Hon'ble Minister of Health and Family
Welfare -Shri Gulab Nabi Azad - on Septem-
ber 24th, 2013 at the India Habitat Centre,
New Delhi. This prize (Citation & Cash
award of Rs. 20,000/-) has been awarded
for her meritorious work carried out in Bio-
medical Research
Congratulations, Dr. John!



We are on the web!
<http://www.indianjpsalumni.org>

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