



**International conference**  
on  
*“Recent Advances in Interdisciplinary Trends in  
Engineering & Applications”*

(14-16 Feb.2019)



Organized by

**IPS ACADEMY**  
**INSTITUTE OF ENGINEERING & SCIENCE**

**International conference**  
on  
*“Recent Advances in Interdisciplinary Trends in  
Engineering & Applications”*

**SCHEDULE**

**Day I (Feb14, 2019)**

Registration	08.30 am-09.30 am
Inauguration	09.30 am-11.00 am
Tea Break	11.00 am-11.30 am
Plenary Session I	11.30 am-01.30 pm
Lunch Break	01.30 pm-02.30 pm
Thematic Session I	02.30 pm-03.15 pm
Thematic Session II	03.15 pm-04.00 pm
Break	04.00 pm-04.30 pm
Thematic Session III	04.30 pm-05.30 pm

**Day II (Feb15, 2019)**

Plenary Session II	10.00 am-11.00 am
Break	11.00 am-11.30 am
Thematic Session IV	11.30 am-12.30 pm
Thematic Session V	12.30 pm-01.30 pm
Lunch Break	01.30 pm-02.30 pm
Thematic Session VI	02.30 pm-04.30 pm
Break	04.30 pm-05.00 pm
Valedictory Ceremony	05.00 pm-05.45 pm
Engineers & Doctors Meeting	06.00 pm-07.00 pm

**Day III (Feb16, 2019)**

Sight Seeing

**DAY I**  
(14.02.2019)

**Plenary Session I**

<b>Timing</b>	<b>Venue</b>	<b>Speaker</b>	<b>Topic</b>
11.30am- 12.30pm	School Quadrangle (Central Building)	<b>Prof. N. S. Dinesh</b> , Professor, Electronics Systems Engg. <b>IISC</b>	Challenges in engineering product development
12.30pm- 01.30pm		<b>Dr. Golubev Vasily</b> , Senior Researcher, Applied Mathematics Moscow Institute of Physics and Technology, <b>Russia</b>	The usage of the grid- characteristic method for the numerical simulation of hyperbolic problems in 2D and 3D
01.30pm- 02.30pm	<b>Lunch Break</b>		

**Thematic Session I**

<b>Timing</b>	<b>Venue</b>	<b>Speaker</b>	<b>Topic</b>
02.30pm- 03.15pm	Audi 1 (Block A)	<b>Prof. Rajesh Dhakal</b> , Professor Structural and Earthquake Engineering at University of Canterbury, <b>New Zealand</b>	Beyond Life-Safety: The Quest Continues
	Audi 3, Audi 4 (Block A)	<b>Dr. Valerie Taly</b> , Director of Center for Molecular Genetics, University of Paris Descartes, <b>France</b>	Droplet-based micro fluidics for cancer research
	School Quadrangle (Central Building)	<b>Prof. Oscar Castillo</b> , Professor, Computer Science and Engg. Tijuana Institute of Technology, <b>Mexico</b>	Nature-Inspired Optimization of Type-2 Fuzzy Logic Controllers
	Audi T & P (Block D)	<b>Prof. K. Krishnaiah</b> , Professor, Chemical Engineering <b>IIT Chennai, India</b>	Chemical Engineering in 21st Century

## Thematic Session II

Timing	Venue	Speaker	Topic
03.15pm- 04.00pm	Audi 1 (Block A)	<b>Dr. Amit Sharma</b> Assoc. Professor, Civil Engineering, IPS Academy Institute of Engg. & Sc. Indore	Earthquake safety and seismic performance
	Audi 3, Audi 4 (Block A)	<b>Dr. J Ponmozhi,</b> Assoc. Professor, Mechanical Engineering, IPS Academy Institute of Engg. & Sc. Indore	Microfluidic devices with big potential
	School Quadrangle (Central Building)	<b>Prof. ErMengJoo,</b> Professor Electrical & Electronic Engg. , Nanyang Technical University, <b>Singapore</b>	Cognitive Robotics: Recent Developments and Futuristic Trends.
	Audi T & P (Block D)	<b>Prof. Stefan Schlosser,</b> Professor Chemical & Environ. Engg. Slovak University of Technology, Bratislava, <b>Slovakia</b>	Extraction of Carboxylic Acid Using Ionic Liquid
04.00pm- 04.30pm	<b>Break</b>		

## Thematic Session III

Timing	Venue	Event	
04.30pm- 05.30pm	Quadrangle (Block B)	Poster Presentation	
Timing	Venue	Speaker	Topic
04.30pm- 05.30pm	School Quadrangle (Central Building)	<b>Dr. Dharmendra Yadav</b> Assoc. Professor, Electronics & Communication Engineering, IPS Academy Institute of Engg. & Sc. Indore	Next generation optical network: design issues and challenges on survivability issues

**DAY II**  
(15.02.2019)

**Plenary Session II**

<b>Timing</b>	<b>Venue</b>	<b>Speaker</b>	<b>Topic</b>
10.00am-11.00am	School Quadrangle (Central Building)	<b>Prof. U.Chandrasekhar,</b> Professor Vel-Tech,India	Additive Manufacturing based approach for design and development of Engineering Systems – New Generation Technology based startup models.
11.00am-11.30am	<b>Break</b>		

**Thematic Session IV**

<b>Timing</b>	<b>Venue</b>	<b>Speaker</b>	<b>Topic</b>
11.30am-12.30pm	Audi 1 (Block A)	<b>Dr. Neelima Satyam,</b> Associate Professor Civil Engineering, IIT Indore, <b>India</b>	Landslide Forecasting and Monitoring using Wireless Sensor Network.
	Audi 3, Audi 4 (Block A)	<b>Prof. Antonio torres Marques,</b> Professor, Dept of Mechanical Engineering and Industrial Management. Faculdade do Universidade do Porto, <b>Portugal</b>	An interdisciplinary approach for the development of additive manufacturing hybrid processes.
	School Quadrangle (Central Building)	<b>Dr. Maode Ma,</b> Associate Professor, School of Electrical and Electronics Engineering, Nanyang Technological University in <b>Singapore.</b>	Efficient and secure mobility supporting 6LoWPAN network
	Audi T & P (Block D)	<b>Dr. P M Shirge</b> Assoc. Prof. IIT Indore	Application of Smart material in Energy Generation

## Thematic Session V

Timing	Venue	Speaker		Topic
12.30pm- 01.30pm	Audi 3, Audi 4 (Block A)	<b>Dr. Pranab K Mondal</b> , Asst. Prof., Mechanical Engineering, IIT Guwahati.		Control in Capillary Filling Dynamics: The role of Contact Line Motion.
	<b>Venue</b>	<b>Chair person</b>	<b>Co Chair</b>	<b>Theme</b>
	Audi 1 (Block A)	<b>Dr. Rajesh Dhakal</b> Professor Structural and Earthquake Engineering at University of Canterbury, <b>New Zealand</b>	<b>Dr. Rakesh Khare</b> Professor CEAMD, SGSITS, Indore	<ul style="list-style-type: none"> <li>• Integrated water Management,</li> <li>• Earthquake Engineering and Health Monitoring.</li> <li>• Reliability, Planning, operation &amp; optimization.</li> </ul>
	School Quadrangle (Central Building)	<b>Dr. Maode Ma</b> , Associate Professor, School of Electrical and Electronics Engineering, Nanyang Technological University in <b>Singapore.</b>	<b>Dr. Sunita Verma</b> , Proffesor & Head Computer Technology and Application SGSITS, Indore	<ul style="list-style-type: none"> <li>• Artificial intelligence,</li> <li>• Internet of things</li> <li>• Big data</li> <li>• Cloud Computing</li> </ul>
	Audi Mess (Central Building)	<b>Prof. ErMengJoo</b> , Professor Electrical & Electronic Engg. , Nanyang Technical University, <b>Singa pore</b>	<b>Dr. Ram Bilas Pachori</b> Assoc. Prof. Electrical Engineering, IIT, Indore	<ul style="list-style-type: none"> <li>• MicroElectronics &amp; Nanotechnology</li> <li>• Signal and Image Processing</li> <li>• Communication Engineering</li> </ul>
Audi T & P (Block D)	<b>Prof. Stefan Schlosser</b> , Professor Chemical & Environ. Engg. Slovak University of Technology, Bratislava, <b>Slovakia</b>	<b>Dr. P M Shirge</b> Assoc. Prof. IIT Indore	<ul style="list-style-type: none"> <li>• Advances in separation process,</li> <li>• Renewable Energy Resources</li> </ul>	
01.30pm- 02.30pm	<b>Lunch Break</b>			

## Thematic Session VI

Timing	Venue	Chair person	Co Chair	Theme
02.30pm- 04.30pm	Audi 1 (Block A)	<b>Dr. Rajesh Dhakal</b> Professor Structural and Earthquake Engineering at University of Canterbury, <b>New Zealand</b>	<b>Dr. Rakesh Khare</b> Professor CEAMD, SGSITS, Indore	<ul style="list-style-type: none"> <li>• Integrated water Management,</li> <li>• Earthquake Engineering and Health Monitoring.</li> <li>• Reliability, Planning, operation &amp; optimization</li> </ul>
	Audi 3 (Block A)	<b>Prof. Antonio torres Marques</b> , Professor, Dept of Mechanical Engineering and Industrial Management. Faculdade do Universidade do Porto, <b>Portugal</b>	<b>Prof. Dhinakaran</b> Assoc. Prof Mechanical Engineering IIT Indore	<ul style="list-style-type: none"> <li>• Microfluidics</li> <li>• BiofluidMechanics</li> <li>• Computational Fluid Dynamics</li> </ul>
	School Quadrangle (Central Building)	<b>Dr. Maode Ma</b> , Associate Professor, School of Electrical and Electronics Engineering, Nanyang Technological University in <b>Singapore.</b>	<b>Dr. Sunita Verma</b> , Proffesor & Head Computer Technology and Application SGSITS, Indore	<ul style="list-style-type: none"> <li>• Artificial intelligence,</li> <li>• Internet of things</li> <li>• Big data</li> <li>• Cloud Computing</li> </ul>
	Audi Mess (Central Building)	<b>Prof. ErMengJoo</b> , Professor Electrical & Electronic Engg. , Nanyang Technical University, <b>Singapore</b>	<b>Dr. Ram Bilas Pachori</b> Assoc. Prof. Electrical Engineering, IIT, Indore	<ul style="list-style-type: none"> <li>• MicroElectronics &amp; Nanotechnology</li> <li>• Signal and Image Processing</li> <li>• Communication Engineering</li> </ul>
	Audi T & P (Block D)	<b>Prof. Stefan Schlosser</b> , Professor Chemical & Environ. Engg. Slovak University of Technology, Bratislava, <b>Slovakia</b>	<b>Dr. P M Shirge</b> Assoc. Prof. IIT Indore	<ul style="list-style-type: none"> <li>• Advances in separation process,</li> <li>• Renewable Energy Resources</li> </ul>
04.30pm- 05.00pm	<b>Break</b>			

## Valedictory Ceremony

Timing	Venue	Event
05.00 pm-	School Quadrangle (Central Building)	Valedictory Ceremony

05.45pm		
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## Keynote Speakers



### **Prof. Oscar Castillo**

Professor, Computer Science & Engg.  
Tijuana Institute of Technology,  
**Mexico**

Research Area: Hybrid fuzzy intelligent  
systems, nonlinear studies



### **Prof. Antonio Torres Marques**

Professor, Mechanical Engineering and  
Industrial Management.

Faculdade do Universidade do Porto,  
**Portugal**

Research Area: Composite Material, NDT,  
Bio Mechanics, till date three patents



### **Prof. Er Meng Joo**

Professor, Electrical & Electronic Engg.  
Nanyang Technical University,  
**Singapore**

Research Area: Intelligent control theory &  
application, fuzzy logic networks, robotics  
& automation.



### **Prof. Stefan Schlosser**

Professor, Chemical & Environ. Engg.  
Slovak University of Technology,  
Bratislava,  
**Slovakia**

Research Area: Chemical & Environmental  
Engineering



**Prof. Rajesh Dhakal**

Professor, Structural and Earthquake  
Engineering University of Canterbury,  
**New Zealand**

Research Area: Performance based  
earthquake design, assessment and  
retrofitting of structures.



**Prof. K. Krishnaiah**

Professor, Chemical Engineering.  
IIT Madras  
**India**

Research Area: Chemical reactor analysis &  
design, Fluidization



**Prof. N. S. Dinesh**

Professor, Electronics Systems Engg. IISC  
Bangalore,  
**India**

Research Area: Shape memory alloy driving  
apparatus, robo puppet, solid printed pillar  
technology



**Dr. Golubev Vasily**

Senior Researcher, Applied Mathematics  
Moscow Institute of Physics and  
Technology,  
**Russia**

Research Area: Grid characterization on  
hexahedral and tetrahedral meshes.



**Dr. Valerie Taly**

Director of Center for Molecular Genetics,  
University of Paris,  
**France**  
Research Area: Microfluidics, dPCR and  
liquid biopsy.



**Dr. Maode Ma**

Associate Professor,  
School of Electrical and Electronics  
Engineering, Nanyang Technological  
University  
**Singapore.**  
Research Area: Network security and  
Wireless networking



**Dr. Valentina E. Balas**

Associate Professor, Automatics & Applied  
Software, University “Aurel Vlaicu” Arad  
**Romania**  
Research Area: Intelligent systems, Fuzzy  
control, Soft computing, Smart sensors,  
information fusion modeling and simulation.



**Dr. U Chandrasekhar**

Pro Vice Chancellor,  
Vel Tech University,  
**India**  
Research Area: Gas Turbine Engineering &  
Additive Manufacturing

*THANK YOU*



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**indore public school**

Estd. 1987



Estd. 1994

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