

KNOWLEDGE PRODUCTS: PUBLICATIONS, PRESENTATIONS...

Knowledge creation, knowledge enhancement, knowledge dissemination and knowledge management have been among the core activities of CSIR-4PI. Ever since its inception, CSIR-4PI has maintained a high knowledge output in terms of publications and other scientific programmes, knowledge synthesis and exchange through conferences, workshops, brainstorming sessions, etc.

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Publications in Journals

1. Sushma Patil, **Anil Kumar V**, et al. Remote extraction of malicious payload for SCTP, *International Journal of Computer Science and Mobile Computing*, 14 (6), 86-91, 2015
2. **Ashish**, Lindholm C, **Parvez I A** and Kühn D, Probabilistic earthquake hazard assessment for Peninsular India, *Journal of Seismology*, 20(2), 629-653, 2016
3. **Goswami P**, Prevention of malaria through forecast based precision vector sanitation and exposure advisory: A Conceptual and Feasibility Analysis, *Current Science*, 108 (1), 19-21,2015
4. **Goswami P, Gouda K C**, Meeting Report: Weather and climate informatics for proactive healthcare, *Current Science*, 108 (7), 1204-1206, 2015
5. **Goswami P, Rao E V S P**, Smart and sustainable agriculture through weather and climate informatics and multi-scale modeling, *CAB Reviews*, 10, 032, 1-13,2015
6. **Goswami P, Rakesh V**, An assessment of optimality of observations for high-resolution weather forecasting, *Pure and Applied Geophysics*, doi:10.1007/s00024-015-1155-1,2015
7. **Goswami P, Sumana Sarkar**, Analysis and quantification of contrasts in observed meteorological fields for foggy and non-foggy days, *Meteorology and Atmospheric Physics*, doi:101007/s00703-015-0384-2, 127, 605–623, 2015
8. Rajwade YA, Swain DK, Tiwari KN, Mohanty UC, **Goswami P**, Measures under the climate change scenarios in rice based cropping system in India, *Environmental Processes*, doi:101007/s40710-015-0115-1,1-19, 2015
9. **Goswami P, Shivnarain Nishad**, Dynamical formalism for assessment and projection of carrying capacity in different socio-climatic scenarios, *Current Science*, 109 (2), 280-287, 2015
10. **Goswami P, Shivnarain Nishad**, Selvaratnam D, A deterministic model of a research organization's evolution and dynamics of performance, *Palgrave Communications*, doi: 101057/palcomms, 1:15012,2015
11. **Gouda K C, Goswami P**, Organization of vertical shear of wind and daily variability of monsoon rainfall, *Meteorology and Atmospheric Physics*, ISSN 0177-7971, doi:10.1007/s00703-016-0437-1, 1-13, 2016
12. Radhika TV, Kumar S S, **Gouda K C**, A Study on the different aspects of the virtual private cloud, *International Journal of Applied Engineering Research*, 10 (86), 343-347, 2015
13. Ajay K P, **Gouda K C**, Nagesh H R, High-Performance Climate Data Analysis using Hadoop, *International Journal of Innovation Technology and Research*, 197-202, 2015
14. X Lin, **Indira N K** et al., Long-lived atmospheric trace gases measurements in flask samples from three stations in India, *Atmos. Chem. Phys.*, doi:10.5194/acp-15-9819-2015, 15, 9819–9849, 2015
15. **Jurismita Baruah, Goswami P**, Dynamical model of daily CO concentration over Delhi: Assessment of forecast potential, *Current Science*, 108 (7), 1369-1374,2015

16. **Kantha Rao B, Goswami P**, A Comparison of ASCAT soil moisture data with in situ observations over the Indian region: A multiscale analysis, *IEEE Transactions on Geoscience and Remote Sensing*, doi: 10.1109/TGRS.2015.2422377, 2015
17. Sen S, **Krishna Mohan T R** and Tiwari M, Impact dispersion using 2D and 3D composite granular, Powder and Particle, 2016
18. Trivedi P C and **Parvez I A**, Characterization of Source Parameters and some Empirical Relations Between them for Kachchh Region, Gujarat, India: Implication of January 26, 2001 Bhuj Earthquake and Its Aftershock Sequence, *International Journal of Geosciences*, 6(10), 1127-1139, 2015
19. Sneha Adhikari, **Parvez I A** and Kiran Kamath, Study of tank with inclined braced staging. *International Journal of Innovative Research in Science, Engineering and Technology*, 5(9), 66-72. doi:10.15680/IJRSET.2016.0505511, 2016
20. Prajwal T P, **Parvez I A** and Kiran Kamath, Adaptive NSP on L-shaped building. *International Journal of Innovative Research in Science, Engineering and Technology*, 5(9), 143-148. doi:10.15680/IJRSET.2016.0505523, 2016
21. **Rajendran K, Sajani Surendran**, Kitoh A and **Stella Jes Varghese**, Reduction of uncertainty associated with future changes in Indian summer monsoon projected by climate models and assessment of monsoon teleconnections, *Proceedings of SPIE* (ISSN: 1996-756X), 98820D, doi:10.1117/12.2229392, 2016
22. **Sajani Surendran**, Sulochana Gadgil, Francis P A, Rajeevan M, Prediction of Indian rainfall during the summer monsoon season on the basis of links with equatorial Pacific and Indian Ocean climate indices. *Environmental Research Letters* (ISSN: 1748-9326), 10 (094004), doi:10.1088/1748-9326/10/9/094004, 2015
23. **Sajani Surendran, Rajendran K**, and **Arya V B**, Precipitation-aerosol relationship over the Indian region during drought and excess summer monsoon years, *Proceedings of SPIE* (ISSN:1996-756X), 98820Q, doi:10.1117/12.2229447, 2016
24. Santhanalakshmi S, Sangeeta K, **Patra G K**, Analysis of neural synchronization using genetic approach for secure key generation, security in computing and communications, *Communications in Computer and Information Science*, 536, 207-216, doi: 10.1007/978-3-319-229157-20, 2015
25. Supriya M, Sangeeta K, **Patra G K**, Trustworthy cloud service provider selection using multi criteria decision making methods, *Engineering Letters*, 24 (1), 1-10, 2016
26. Supriya M, Sangeeta K, **Patra G K**, A fuzzy based hierarchical trust framework to rate the cloud service providers based on infrastructure facilities, *International Journal of Performability Engineering*, 12(1), 55-62, 2016
27. Srinivas S, Vijayalakshmi A, Subramanyam Reddy A, and **Ramamohan T R**, MHD flow of a nanofluid in an expanding or contracting porous pipe with chemical reaction and heat source/sink, *Propulsion and Power Research*, 5(2), 134-148, 2016
28. Srinivas S, Reddy A S, **Ramamohan T R** and Shukla A K, Thermal-diffusion and diffusion-thermo effects on MHD flow of viscous fluid between expanding or contracting rotating porous disks with viscous dissipation, *J. Egyptian Math.Soc.*, 24(1), 100-107, 2016

29. Srinivas S, Shukla A K, **Ramamohan T R** and Reddy A S, Influence of thermal radiation on unsteady flow over an expanding or contracting cylinder with thermal-diffusion and diffusion-thermo effects, *J. Aerospace Engg.* 28(5), 2015
30. Srinivas S, Reddy A S and **Ramamohan T R**, Mass transfer effects on viscous flow in an expanding or contracting porous pipe with chemical reaction, *Heat Trans. Asian Res.*, 44(6), 552-567, 2015
31. **Ramamohan T R**, Shivakumara I S and Madhukar K, Numerical Simulation of the Dynamics of a Periodically Forced Spherical Particle in a Quiescent Newtonian Fluid at Low Reynolds Numbers, *Lect Notes Comp Sci*, 5544:591-600, 2009
32. **Shekhar S, Parvez I A**, Reflection and refraction of attenuated waves at the interface between cracked poroelastic medium and porous solid saturated with two immiscible fluids, *Transport in Porous Media*, 113(2), 405-430, 2016
33. **Shekhar S, Parvez I A**, Propagation of Torsional surface waves in an inhomogeneous anisotropic fluid saturated porous layered half space under initial stress with varying properties, *Applied Mathematical Modelling*, 40, 1300-1314, 2016
34. **Shekhar S, Parvez I A**, Propagation of torsional surface waves in a double porous layer lying over a Gibson half space, *Soil Dynamics and Earthquake Engineering*, 80, 56-64, 2016
35. **Shekhar S, Parvez I A**, Wave propagation across the imperfectly bonded interface between cracked elastic solid and porous solid saturated with two immiscible viscous fluids. *International Journal of Solids and Structures*, 75, 299-308, 2015
36. Ningombam S S, **Sridevi Jade, Shrungheshwara T S**, Validation of water vapor retrieval from Moderate Resolution Imaging Spectro-radiometer (MODIS) in near infrared channels using GPS data over IAO-Hanle, in the trans-Himalayan region, *Journal of Atmospheric and Solar-Terrestrial Physics*, <http://dx.doi.org/10.1016/j.jastp.2015.11.019>, 137, H-J. Song, 76-85, 2016
37. Varma O P and **Sridevi Jade**, Report on 4th Edition of Pan-India Debating Competition on promoting communication skill in post-graduate Earth System Sciences Students, *Journal Indian Geological Congress (IGC)*, 7(2), 55-62. 2015.
38. Catherine J K, **Vijayan M S M**, Syeda Rabiya U B, **Shimna K**, Gahalaut V K and Ramesh D S, Dichotomy in mode propagation of coseismic ionospheric disturbance: Observations from 11 April 2012 Indian Ocean earthquake, *Journal of Geophysical Research: Space Physics*, 120(5) 3854-3867

International Patent Published

Anil Kumar V and Debabrata Das, Method and Device for Detecting a Malicious SCTP Terminal, International Patent Application No. WO 2015/118553 A1, Published under the Patent Cooperation Treaty by *World Intellectual Property Organization (WIPO)*, 13 Aug, 2015

National Patent Filed

Anil Kumar V and Debabrata Das, Method and device for robust Multi Path Transmission Control Protocol (MPTCP) against data sequence signal manipulation attack, Provisional Patent Application No. 2186DEL2015, 20 July 2015

Publications in Proceedings

1. Nagaraj Bhat, **Gouda K C**, Manumohan and Reshma Bhat , Monitoring and Estimation of Reservoir Water Volume using Remote Sensing and GIS, ***Proceedings of EGU General Assembly***, Vienna, Austria. id.1123, 12-17 April, 2015
2. Chowdari K K, Girisha R and **Gouda K C**, A study of rainfall over India using data mining, ***IEEE International Conference on Emerging Research in Electronics, Computer Science and Technology*** (ICERECT), Mandya, IEEE, doi: 10.1109/ERECT.2015.7498985, 44-47,2015
3. Shruti, **Gouda K C**, Anandkumar K R, Understanding the Impact of Climate Change on the Human Disease: A Survey, ***Proceedings of the International Conference on Information Science & Technology for Sustainability & Innovation*** (ICISTSI' 2015), Jain University, Bengaluru, doi:10.3850/978-981-09-4426-1_129, 22-23 May, 2015.
4. Niveditha P V, **Gouda K C** and Rashmi B C, Modelling and Analysis of Weather and Climate, ***Proceedings of The International Conference on Information Science & Technology for Sustainability & Innovation*** (ICISTSI' 2015), Jain University, Bengaluru, doi:10.3850/978-981-09-4426-1_115, 22-23 May, 2015.
5. Kavyashree B P, **Gouda K C** and Lakshmikantha G C, Data Mining Approach for Climate Studies, ***Proceedings of The International Conference on Information Science & Technology for Sustainability & Innovation*** (ICISTSI' 2015), Jain University, Bengaluru, doi:10.3850/978-981-09-4426-1_116, 22 -23 May, 2015.
6. Priya P, **Gouda K C** and Bhavana Gowda D M, Software System for Dynamical Crop Modelling, ***Proceedings of the International Conference on Information Science & Technology for Sustainability & Innovation*** (ICISTSI' 2015), Jain University, Bengaluru, doi:10.3850/978-981-09-4426-1_120, 22-23 May, 2015.
7. Samantray P, **Gouda K C**, **Goswami P**, Study of Extreme Rainfall Events over Odisha using observation and simulation, ***Proceedings of the International Scientific Conference our Common Future under Climate Change***, Paris,109, 7-10 July, 2015,
8. Nagaraj Bhat and **Gouda K C**, Climate Change Studies over WesternGhats Region using Remote Sensing & GIS Modelling, ***Proceedings of the International Scientific Conference Our Common Future under Climate Change***, Paris,141, 7-10 July, 2015
9. Parthasarathi Barik, **Gouda K C**, Nagaraj Bhat, **Goswami P**, Impact of Climate change in the Mangrove Distribution across the Indian Coast, ***Proceedings of AGU Fall Meeting***, San Francisco, 14-18Dec, 2015
10. Shaktidhar Nahak, **Gouda K C**, **Goswami P**, Simulation of Extreme Rainfall Events over India using Variable resolution GCM, ***Proceedings of National Symposium on Understanding and Forecasting the Monsoon Extremes***, IITM Pune, 23-24 February, 2016
11. Rahisha T, **Gouda K C** and Sreedhara V, Shoreline Change Model for Coastal Zone management off Mangalore Coast, ***Proceedings of the UGC-Sponsored Fourth International UGIT Conference on Remote Sensing and GIS Applications on Coastal Management***, Mangalore,16-17Feb, 2016

12. **Gyanendranath Mohapatra**, Swetha Manjunath, Sasmita Behera , and Pratap Kumar Mohanty, Tropical Cyclone Track Analysis Over Indian Coast Using Spatio-Temporal data-mining, **EGU General Assembly**,17, EGU2015-1038, 2015
13. Ajilesh P P, **Himesh S, Rakesh V** and Sahoo S K, Analysis of Urban Heavy Rainfall Events during Monsoon Period using High Resolution Observation and Mesoscale Modelling, **Proceedings of IMSP Annual Monsoon Workshop and National Symposium on Understanding and forecasting the monsoon extremes**, IITM, 23-24February, 2016
14. Sahoo S K, **Himesh S, Gouda K C**, Ajilesh PP, Samantray P, **Rakesh V**, et al.,North-East Monsoon extreme 2015: simulation of heavy rainfall event over Chennai during 27th November to 2nd December, **Proceedings of IMSP Annual Monsoon workshop and National Symposium on Understanding and forecasting the monsoon extremes**, IITM, 23-24February, 2016
15. Ajilesh P P, **Himesh S, Rakesh V**, and **Goswami P**, Impact of urbanisation on rainfall pattern and surface temperature over selected Indian cities, **National Space Science Symposium** (NSSS2016), VSSC, Trivandrum, 09-12 February, 2016
16. **Kantha Rao** and **Goswami P**, Divergence of simulations due to machine dependence: Assessment and Implications on Climate Informatics, **Proceedings of the Fifth International Workshop on Climate Informatics**, CI 2015, ISBN: 978-0-9973548-0-5, September 2015.
17. Chhibber Nalin, **Patra G K**, Synchronization of chaos in multiple three-dimensional chaotic maps and its application in cryptography, **International Symposium on Technology Management and Emerging Technologies** (ISTMET), IEEE, doi: 10.1109/ISTMET.2015.7359058, 355 - 359, 2015,
18. Praveen Sand **Rakesh V**, Forecasting of monsoon extreme rainfall events associated with tropical depressions over the Arabian sea and Bay of Bengal, **Proceedings of IMSP Annual Monsoon workshop and National Symposium on Understanding and forecasting the monsoon extremes**, IITM, 23-24February, 2016
19. Neethu C and **Ramesh K V**, Understanding the dynamics of land-atmosphere coupling during heat waves in 2015, **National Space Science Symposium 2016**, VSSC Thiruvananthapuram, 9-12 Feb 2016.
20. Alfred Johny and **Ramesh K V**, Understanding of the ocean-atmosphere coupling during extreme events in east coast of India, **Annual Monsoon Workshop – 2015 and National Symposium on Understanding and Forecasting the Monsoon Extremes**, IITM, Pune, 23-24February, 2016.
21. ShafeerK B, **Ramesh K V**, Alfred johny, Neethu C, Developing new high-resolution drought severity Index over India and its relationship with large-scale features, **Annual Monsoon Workshop – 2015 and National Symposium on Understanding and Forecasting the Monsoon Extremes**, IITM, Pune
22. **Vijayan M S M**, Role of Physics in understanding natural disasters, **Proceedings of National Conference on Advances in Material Science**, 5544, 591-600,2016

Publications in Books

Magrin A, **Parvez I A**, Vaccari F, Peresan A, Rastogi BK, Cozzini S, Bisignano D, Romanelli F, **Ashish**, Choudhury P, Roy KS, Mir RR, Panza GF, Neo-deterministic Definition of Seismic and Tsunami Hazard Scenarios for the Territory of Gujarat (India), S D'Amico (ed.), **Earthquake and Their Impacts on Society**, *Springer Natural Hazards*, 193-212, 2016

Presentations in Conferences/ Symposia/ Workshops/ Seminars

1. Nekrasova A, Kossobokov V and **Parvez I A**, Earthquake hazard and risk assessment based on unified scaling law for earthquakes: State of Gujarat, India, *EGU General Assembly Conference* 18, 7794, 2016
2. Sahoo S K, **Gouda K C**, **Himesh S**, Ajilesh P P, Samantray P, **Mohapatra G N**, **Ramesh K V**, **Rakesh V** and **Kantha Rao**, Northeast Monsoon Extreme 2015: Simulation of Heavy Rainfall event over Chennai during 29 November to 2 December, Annual Monsoon Workshop 2015 and a *National Symposium on Understanding and Forecasting the Monsoon Extremes*, IMS & IITM-Pune, 23-24 February 2016
3. Ajilesh P P, **Himesh S**, **Rakesh V**, **Goswami P**, Impact of Urbanization on Rainfall and Surface Temperature Trends Over Different Indian Cities in *National Space Science Symposium – 2016*, VSSC, Thiruvananthapuram, Kerala, 9-12 Feb, 2016
4. Ajilesh P P, Sahoo S K, **Gouda K C**, **Himesh S**, **Mohapatra G N**, **Ramesh K V**, **Rakesh V** and **Kantha Rao**, Analysis of Urban Rainfall Events during Monsoon Period using High Resolution Observation and Mesoscale Modelling, Annual Monsoon Workshop 2015 and a *National Symposium on Understanding and Forecasting the Monsoon Extremes*, IMS & IITM-Pune, 23-24 February 2016
5. Rahisha T, **Gouda K C**, Laxmikanth BP, Change Detection Study in Karnataka Coast line Using Remote Sensing and Geographic Information System, *National Conference on Geospatial Information & Technology Advancement (GITA-2K15)*, SMV Inst. of Tech. & Mgt., Udupi, 16-17Oct, 2015.
6. Nischitha N, **Gouda K C**, Laxmikanth BP, Monitoring Ambient Air Quality Level over Bengaluru using Remote Sensing & GIS, *National Conference on Geospatial Information & Technology Advancement (GITA-2K15)*, SMV Inst. of Tech. & Mgt., Udupi, 16-17Oct, 2015.
7. Sobha N V, **Gouda K C**, Laxmikanth BP, Ground Water Mapping over Bengaluru using GIS *National Conference on Geospatial Information & Technology Advancement (GITA-2K15)*, SMV Inst. of Tech. & Mgt., Udupi, 16-17Oct, 2015.
8. **Himesh S**, Sahoo S K, **Gouda K C**, **Mohapatra G N** and **Goswami P**, *Simulation and Analysis of a Heavy Rainfall Event over Bengaluru during October 2013*, TROPMET 2015, a *National Symposium on Weather and Climate Extremes*, IMS & Panjab University, Chandigarh, 15-18 February 2015.
9. **Kalyani Devasena C**, **Sharada M K** and **Swathi P S**, Ocean biogeochemical studies of the Arabian sea using Model simulations and observations, *Eighth National Women's Science Congress*, 7-8 November 2015, Bengaluru
10. **Kalyani Devasena C**, **Sharada M K** and **Swathi P S**, Impact of Physical processes on Marine Ecosystem Dynamics, *IO50-NIO International Symposium*, Dec.2015

11. Shelva Srinivasan M K, **Kalyani Devasena C, Swathi P S, Sharada M K** and Sundara Deepthi MV, Effect of Iron limitation on Primary Productivity and Carbon Flux in the Arabian Sea using a 3-D Biogeochemical Model, *IO50-NIO International Symposium*, Dec.2015
12. Neethu C, Shafeer K B and **Ramesh K V**, Dynamics of soil moisture-temperature coupling during temperature extremes: Annual Monsoon Workshop 2015 and National Symposium on Understanding and Forecasting the Monsoon extremes, IITM Pune, 23-24 Feb,2016
13. Alfred Johny and **Ramesh K V**, Reliable heat wave projections over India for twenty first century, National Space Science Symposium 2016, VSSC Trivandrum, 9-12 February, 2016.
14. Shafeer K B and **Ramesh K V**, Evaluation of Indian Summer Monsoon using high resolution simulation, National Space Science Symposium 2016, VSSC Trivandrum, 9-12 February, 2016.
15. **Sharada M K, Swathi P S, Kalyani Devasena C**, Sundara Deepthi MV and Shelva Srinivasan MK, Study of subsurface oxygen distribution in the north Indian Ocean, *IO50-NIO International Symposium*, Dec.2015
16. Shrungheshwara T S, **Chiranjeevi Vivek G**, Anil Kumar Maletha, Shantanu Sarkar, **Sridevi Jade**, Landslides studies using Global Positioning System (GPS), *5th International Conference on Future Earth Perspectives in South Asia*, Tiruchirappalli, 05-07Feb, 2016

Internal Reports

1. **Chiranjeevi Vivek G**, Suri Babu D, Mir RR, **Parvez IA** and **Sridevi Jade**, Establishment of CGNSS Stations in Kashmir Valley, TRCM1502, 2016
2. **Kantha Rao B, Himesh S, Rakesh V**, et. al. Multi-level Soil Moisture characteristics over Indian region using observation data, RRCM1601, 2016
3. **Himesh S**, Ajilesh P, Sanjeeb K Sahoo, **Rakesh V**, et al., Analysis of Rainfall and Surface Temperature Patterns over Select Indian Cities, RRCM1602, 2016
4. **Rakesh V, Goswami P** and Srinivasa Reddy G S, Operational High resolution Rainfall Forecasts over Karnataka: Evaluation Report (September 2010-March 2015), RRCM1503, September 2015

Participation in Conferences/ Symposia/ Workshops/ Training Programmes

Ashapura Marndi

Cyberoam Training Programme, 29-30 April, 2015
 Fifth elephant Machine Learning & Analytics Conference, 16-17 July 2015
 Workshop on IPv6 for Enterprises, 18 August, 2015
 Data Science for Big Data Analytics (DSBDA'15), 14-16 October, 2015

Chiranjeevi Vivek.G

International Conference on Future Earth Perspectives in South Asia, Dept. of Geography, Bharathidasan University, Tiruchirappalli, 05-07 February, 2016

Workshop on Fundamentals of GNSS/IRNSS and Applications to Atmospheric Science, National Atmospheric Laboratory, Gadanki, 26 February, 2016.

Mohapatra G N

Taylor & Francis Group Journal's Editorial Roundtable 2016, Bengaluru, 9 March 2016.

Gouda K C

Journal's Editorial Roundtable organized by Taylor & Francis Group, Bengaluru, 8 March 2016.
DST-Lockheed Martin India Innovation Growth Workshop, Bengaluru, 5 February 2016.

Senthilkumar V

Conference on Computational PDE 2015, TIFR Center for Applicable Mathematics, Bengaluru, 21- 23 December, 2015

Rajendran K

CTCZ-Subgroup Meeting-Large Scale Component, COAS, IISc, 7-8 August 2015
Climate Change and Extreme Events, National Workshop on Technology Development and Application for Climate Change, NIO-RC, Kochi, 17 March, 2016

Sajani Surendran

CTCZ-Subgroup Meeting-Large Scale Component, COAS, IISc, 7-8 August 2015

Vijayan M S M

National conference on Advances in material science, Department of Mathematics, M V Muthiah Government Arts College for Women, Dindigul, February 12, 2016
Role of Physics in understanding natural disasters, National Conference on Advances in material science, 12 February, 2016

Conference/Workshops/Seminars/Scientific Meetings organized by CSIR-4PI

4th Edition of Pan-India Debating Competition

CSIR-Fourth Paradigm Institute hosted the 4th edition of Indian Geological Congress (IGC) Pan-India debating competition on the topic Sustainable development in India is not possible without applications of knowledge of earth sciences on 27th November, 2015. The Indian Geological Congress (IGC) conceived the Pan-India debating competition in March 2013 to identify talent in oration and make the young scientists to be concerned with the dreaded results of climate change, atmospheric pollution & related problems, which have turned to be challenges; now. As India is a large country, organization of the event had been divided into FIVE Editions to cover the entire country, to be followed by the finale' in New Delhi.

As a part of this, 4th edition is exclusively for Southern part of India held in CSIR-4PI. 24 students, research scholars participated from several south-Indian universities/institutes. Participants debated extempore about the sustainable development, importance of renewable resources, expertise needed to use the natural resources in a balanced way without affecting the nature and knowledge in earth sciences field. Three Judges- Dr. Indira NK , CSIR-4PI; Prof. Varma OP, President and Prof. Dave VKS, Secretary of IGC have graded the participants based on prelude, content, substance, style, language, conclusion and time availed. Three participants were awarded with cash prize and certificate. This event was coordinated by Dr. Sridevi Jade and compeered by Mrs. Pavithra NR.

Foundation Day

Foundation Day of CSIR-4PI was celebrated on 11th August 2015. Foundation Day Lecture was delivered by Prof.K Kesava Rao, Dept. of Chemical Engineering, IISc, Bengaluru. Annual Report of CSIR-4PI for 2014-15 was released.

Technology Day Celebrations 2015

Seventeenth Technology Day Lecture on Successful Innovation in Aerospace by the Chief Guest Mr David Jon Ranson, Managing Director, Moog India Technology Center, Bengaluru, on Monday, 11 May 2015, S R Valluri Auditorium, NAL, Bengaluru

Symposium on Complex Systems and Applications, September 29 2015

National Workshop on Technology Development and Application for Climate change studies (NATDAC)

CSIR-4PI conducted one-day National Workshop on Technology Development and Application for Climate Change Studies (NATDAC) on 17th March 2016, at NIO Regional Centre, Kochi. In this workshop advanced training was given to about 25 registered participants selected from nation-wide applications, comprising young scientists, staff and researchers from various universities and colleges. Participants were trained through hands-on session to learn how to estimate and analyse climate change and its impacts. In addition, three domain experts viz. Prof. P. V. Joseph, Dr. N. Subash, Dr. M. R. Ramesh Kumar gave lectures and classes as resource persons. The workshop was organized by Dr. K. Rajendran and was coordinated by Dr. Sajani Surendran.

Invited Talks

Anil Kumar V

Attacks and Countermeasures in Critical Infrastructure, Information, Network and Smart Grid Security Workshop, Central Power Research Institute (CPRI), Bengaluru, 3-4, March 2016

Packets, Attacks and Protocols in Cyberspace, Special team of IT professional of Government of India, C-DAC, Noida, 13 January, 2016

Feedback manipulation and associated Concerns in next generation transport layer protocol on the Internet, Embedded Safety and Security Summit 2015, NIMHANS Convention Center, Bengaluru, 17 June 2015

Supercomputing for Mathematicians, Mathematics Faculty Training Programme of Vishveshwaraya Technological University, M S Ramaiaha College of Engineering, 14 July 2015

Security Challenges and Countermeasures in Next Generation Transport Protocols, Technical Workshop on Trends on Networking and Communication, International Institute of Information Technology (IIIT-B), Bengaluru, 21 April, 2016

Gouda KC

Disaster Management using Geospatial Tools, Karnataka Remote Sensing Application Centre, Bengaluru, 12 July 2015

How Technology is Changing the Face of Innovations, Jyoti Summit, The Quantum leap in it 2020, Jyotinivas College, Bengaluru, 10th October 2015

Climate Data Research in the age of Big Data, Nagarjuna College of Engineering & Technology, Bengaluru, 12 Sep 2015

Application of Cloud Computing in different sectors, Key note address, FDP on Cloud Technology, SJBIT, Bengaluru, 22Jan 2016

Living with Modelling, Simulation and GIS, Thematic Workshop on use of GIS in Informed Planning & Decision Making, Centre for Innovation in public systems and Ministry of Communication & Information Technology, Govt. of India, New Delhi, 29-30 March 2016

Patra GK

An Inter-disciplinary Modelling Approach for Designing Cryptographic Primitives

Department of Mathematics, M S Ramaiah Institute of Technology, Faculty Development Program on Applied Mathematical Modelling, 15 July 2015

JNN College of Engineering, Shimoga on 16 December 2015

Mount Carmel College, Bengaluru on 20 February 2016

Rajendran K

Role of seasonal cycle and interannual variability in future projection of Indian summer monsoon rainfall, LORRI Workshop on Air Pollution and Climate Change in South Asia: Bridging the Science, Imperial College, London, 9 July 2015

Future Climate Narratives for Southern India, Expert Elicitation Workshop, London School of Economics and Political Sciences, London, 10 July 2015

CMIP5 Based Climate Projections and Uncertainties over South Asia, Seventh National Workshop on Science of Climate Change and Sustainable Development, NCESS, Thiruvananthapuram, 19-20 August 2015

CMIP5 Projections of Changes in Indian Summer Monsoon Rainfall, National Climate Science Conference, DCC, IISc, Bengaluru, 2-3 July 2015

Climate and Extreme Events under Global Warming Scenarios for Indian Coastline and Islets, VACCIN Workshop, Kadmat, Lakshadweep, 11-14 March 2016

CLIMEX and MOSAICC, First Pls' Meet of VACCIN, NIO-RC, Kochi, 31 July 2015

Monsoon 2015, Monsoon Cafè, DCC, Indian Institute of Science, Bengaluru, IIT Bombay, 12 August 2015

CFSv2 Seasonal Forecast of Monsoon 2015, Monsoon Cafè, DCC, Indian Institute of Science, Bengaluru, IIT Bombay, 30 September 2015

Extreme June Rainfall over India and Link with Pacific in an Ultra-high Resolution atmospheric GCM, IMS Workshop, IITM, Pune, 24 February 2015

Ramesh K V

Weather and Climate informatics for industrial and societal applications, INSPIRE SC. CAMP, DST, National Institute Science & Technology, Orissa, Govt. India, 27-31 January, 2016,.

Weather and Climate informatics: Applications Agriculture and renewable energy, 1st International Conference on Climate Science Frontiers of Climate Research to Enhance Cooperation of Climate Information and Services for Sustainable Development Planning in North East India, Interdisciplinary Climate Research Center Department of Physics, Cotton College, Cotton College State University, Guwahati on 7-8 March 2016

Sajani Surendran

Extreme June Rainfall over India and Link with Pacific in an Ultra-high Resolution atmospheric GCM, IMS Workshop, Indian Institute of Tropical Meteorology, Pune, 24 February 2015.

Sridevi Jade

Inverse Modelling of GPS derived surface displacements, FDP on Theory and Applications of Mathematical Modelling in Engineering, MSRIT, Bengaluru, 13 July 2015.

Paradigm's of Science, National Seminar on Mathematical Modelling on the occasion of National Mathematics Day, GITAM University, Bengaluru, 22 December 2015.

Vijayan M S M

Role of Physics in understanding natural disasters, National conference on Advances in material science, Department of Mathematics, M. V. Muthiah Government Arts College for Women, Dindigul, 12 February, 2016

Physics of Earthquakes, Festophys'16, Gandhigram Rural University, Gandhigram, February 18, 2016

Seminars/Lectures

Sushant Shekhar, AcSIR Ph. D. Scholar, CSIR-4PI, A Theoretical Study of wave Propagation in Heterogeneous and Isotropic/ Anisotropic Media, June 18, 2015

Shreyas J S (Spark Scholar) NIT, Rourkela, Mathematical Model for (Auto)- Immune Resistance Based on Pathogen Gradient, July 10, 2015

Per Nyber, Cray Inc, Seoul, Korea, Global trends in Weather and Climate Modelling, Oct 7, 2015

Maya Yajnik, Solution Architect, Ericsson, New Jersey, USA, Emerging Trends in the Telecommunications industry, Monday, Oct 12, 2015

Surajit Sen, Prof, Dept of Physics, Univ of NY & Brock University, Canada, Physics of and with Nonlinear waves—Why they Matter, Oct 8, 2015

Luiz DeRose, Director, Cray Inc., Performance and Programmability Challenges in Current and Future Supercomputers, February 8, 2016

Visitors at CSIR-4PI

M Rajeevan, Director, IITM, 14 May 2015.

Gil Briman, VP, Mellanox Technologies Inc. USA, 30 September 2015

Surajit Sen, Prof., Dept. of Physics, SUNYAB (Buffalo), NY, 05-09 October 2015

Per Nyberg, Director, Business Development, CRAY Inc, 5-7 October 2015

Nitin Patil, Centre for Climate Studies, IIT Bombay, 6-8 January 2016

Luiz DeRose, Director, Programming Environments, CRAY Inc, USA, 8 Feb 2016

Fabio Galetti, ABB (USA), 9 Feb 2016

