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## Important Dates

2<sup>nd</sup> Aug, 2019: Full Paper Submission

15<sup>th</sup> Sep, 2019: Notification of Acceptance

4<sup>th</sup> Oct, 2019: Final Paper Submission

4<sup>th</sup> Oct, 2019: Early Bird Registration

10<sup>th</sup>-14<sup>th</sup> Dec, 2019: Conference



## Conference Venue

Indian Institute of Technology Delhi,  
Hauz Khas, New Delhi, India-110016



## About ISAP

<http://isap-power.org>

ISAP is an international organization and the result of the integration of International Conferences on Expert System Applications to Power System (ESAP) with the International Forum on Applications of Neural Networks to Power Systems (ANNPS).

Earlier, ESAP had four editions: Stockholm, Sweden and Helsinki, Finland (1987); Seattle, USA (1989); Yokohama, Japan (1991); and Melbourne, Australia (1993). The ANNPS conferences had two editions: Seattle, USA (1991); and Kobe, Japan (1993). Here is the list of ISAP conferences held so far:

ISAP 1994 – Montpellier, France

ISAP 1996 – Orlando, Florida, USA

ISAP 1997 – Seoul, Korea

ISAP 1999 – Rio de Janeiro, Brazil

ISAP 2001 – Budapest, Hungary

ISAP 2003 – Lemnos, Greece

ISAP 2005 – Washington DC, USA

ISAP 2007 – Kaohsiung, Taiwan

ISAP 2009 – Curitiba, Brazil

ISAP 2011 – Crete, Greece

ISAP 2013 – Tokyo, Japan

ISAP 2015 – Porto, Portugal

ISAP 2017 – San Antonio, Texas



## Official Language

The conference's working language will be English only.

# 20<sup>th</sup> International Conference on Intelligent Systems Applications to Power Systems (ISAP)



December 10-14, 2019  
New Delhi, India  
Organized at IIT Delhi

<http://isap-power.org/2019>

1<sup>st</sup> Call for Papers



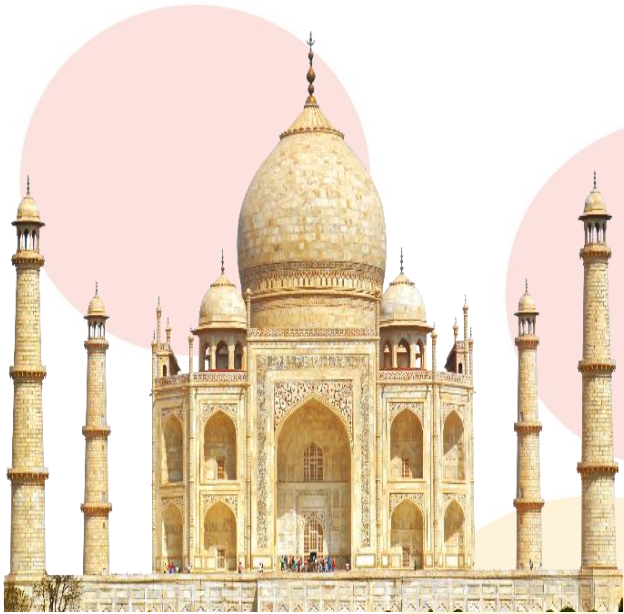
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## Invitation

On behalf of the local organizing committee and of the ISAP Board Directors, we invite you to attend to the 20<sup>th</sup> International Conference on Intelligent Systems Applications to Power Systems (ISAP). The ISAP 2019 continues the tradition of preceding conferences on topics selected from current Power Systems problems and applications of intelligent systems.

ISAP is specially dedicated to provide a forum for academics, industry, and students to discuss innovative intelligent systems applications in the area of operation, control, planning and maintenance of large interconnected and isolated or weakly interconnected power systems, and their particular components. ISAP 2019 focuses on power systems operation in a competitive environment, renewable energy and distributed generation, and also other subjects of interest in modern power systems. Employment of artificial intelligence technologies is in the special scope of the conference, but also intelligent approaches achieved with conventional programming are sought. Proposed subjects should be beyond the phase of declarations of interest or presentations of ideas; papers reporting practical realization and application will have priority.

The conference will provide opportunities for tutorials and technical visits.

## Preferential Subjects

The conference welcomes papers on intelligent systems techniques applied to electrical power and energy systems (generation, transmission, distribution, markets, and electrical installation) with preference to:

- Load and renewables forecasting and estimation;
- Fault diagnosis and prognosis;
- Condition monitoring and asset management;
- Intelligent enterprise systems, e.g., intelligent outage management;
- System reliability, security, and adequacy;
- Big data, data science, data analytics, and machine learning applications in power systems;
- Innovative and/or emerging applications of intelligent systems in power systems, e.g., machine learning, deep learning, and autonomous power systems;
- Special systems e.g., vessel systems, underwater systems, micro-grids, nano-grids, and autonomous power system;
- Social, legal, ethical, and business issues linked with the conference topics;
- Intelligent estimation and classification techniques including neural nets, fuzzy systems, data mining, and decision tree;
- Knowledge-based system including rule-based systems, expert systems, and model-based reasoning;
- Advanced optimization techniques including genetic algorithm, particle swarm optimization, ant colonies, immune system, and bacterial foraging;
- Multi-agent systems, evolutionary intelligent agents, and adaptive distributed computing and control;
- Hybrid intelligent systems;
- Computational neuroscience;
- Game Theory;
- Molecular and quantum computing.

## To the Authors

- The authors are invited to submit a PDF file of the full paper in IEEE PES standard double column format, not exceeding 6 pages.
- All papers must be submitted by 2<sup>nd</sup> August 2019 on the conference submission website.
- Authors will be notified via email the acceptance or rejection of the paper by 15<sup>th</sup> September 2019.

## IIT Delhi

IIT Delhi is situated at Hauz Khas in South Delhi, which is a landmark place in the colorful and chequered history of Delhi. Bounded by the Sri Aurobindo Marg on the east, the Jawaharlal Nehru University Complex on the west, the National Council of Educational Research and Training on the south, and the New Ring Road on the north, the Institute campus is flanked by Qutub Minar and the Hauz Khas monuments. Well connected to the major city centers by open and wide roads, the Institute campus is about 19 km away from the Delhi Main Railway Station, 14 km from the New Delhi Railway Station, 21 km from the Inter-State Bus Terminal and 10 km from Delhi Airport.

The campus of the Institute extends to an area of 320 acres. With many topographical features, imaginatively laid out with picturesque landscape, numerous buildings of various nature and stature, and clean and wide roads. The campus presents a spectacle of harmony in architecture and natural beauty.

## Location

Delhi, the capital city of India, is a center for research and education. Delhi is the home of many of the renowned universities and research organizations. During your stay in New Delhi, you will have the opportunity to visit various museums, ancient monuments, religious places, and Lutyens' Delhi.

The city gives opportunities to visit various other nearby located tourist destinations like the Taj Mahal; one of the seven wonders of the world.

## Student Participation

Students working on research subjects related with the theme of the conference are highly encouraged to attend the ISAP and present their works. The organizers will be actively pursuing a program to provide a reduced rate to student participants.

## Conference Information

<http://isap-power.org/2019>

For any questions, please contact us at :  
info@isap-power.org  
2019@isap-power.org