Swami Keshvanand Institute of Technology, M & G, Jaipur
Department of Electrical Engineering

Title of the Activity: Short Term Training Program on OPTIMIZATION TECHNIQUES AND THEIR APPLICATIONS TO POWER SYSTEMS (OTAPS-2020).

Type: National

Objectives:

- To understand the theory of optimization methods and algorithms developed for solving various types of optimization problems
- To develop and promote research interest in applying optimization techniques in problems of Engineering and Technology
- To apply the mathematical results and numerical techniques of optimization theory to problems of Power Systems (Economic Load dispatch (ELD),Strategic Bidding Problem (SBP), Automatic Generation Control (AGC) etc.)

Program Details

INAUGURATION SCHEDULE

Venue: Sir M. Visvesvaraya Block (Gyan Mandir Auditorium)

DAY-1 (March 02, Monday)

8:00 am	**09:00 am**	Registration (All Participants)	
09:00 am	**09:05 am**	Lamp Lighting by Guests	
09:05 am	**09:10 am**	Welcome Note	Sh. Surja Ram Meel, **Chairman, SKIT**
09:10 am	**09:15 am**	About Institute	Prof. (Dr.) S. L. Surana, **Director (Academics)**
09:15 am	**09:20 am**	Motivational Talk	Shri Jaipal Meel, **Director, SKIT**
1. Floral Welcome & Felicitation of **Chief Guest – Prof. (Dr.) M. P. Poonia**, Vice Chairman, AICTE, New Delhi by **Sh. Surja Ram Meel, Chairman, SKIT** 2. Floral Welcome & Felicitation of **Guest of Honor – Dr. Mani Madhukar**, Program Manager - University Relations, IBM India Pvt. Ltd. by **Shri Jaipal Meel, Director, SKIT** 3. Floral Welcome & Felicitation of **Guest of Honor – Prof. (Dr.) Rajesh Kumar**, HOD, Department of Electrical Engineering, MNIT Jaipur by **Prof. (Dr.) S. L. Surana, Director (Academics), SKIT** 4. Floral Welcome & Felicitation of **Guest of Honor – Dr. Meghanshu Vashista**, Associate Professor, Department of Mechanical Engineering, IIT, BHU by **Prof. (Dr.) Ramesh Kumar Pachar, Principal, SKIT**			
09:30 am	**09:35 am**	Overview of the Programme	Prof. (Dr.) Anil Chaudhary (Course Coordinator, IT)
09:35 am	**09:40 am**	Overview of the Programme	Prof. (Dr.) Akash Saxena (Course Coordinator, EE)
09:40 am	**09:45 am**	Overview of the Programme	Dr. Manoj Kumar Sain (Course Coordinator, ME)
09:45 am	**09:55 am**	Address by Guest of Honor	**Guest of Honor** – Dr. Mani Madhukar, Program Manager - University Relations, IBM India Pvt. Ltd.
09:55 am	**10:05 am**	Address by Guest of Honor	**Guest of Honor** – Prof. (Dr.) Rajesh Kumar, HOD, Department of Electrical Engineering, MNIT Jaipur

10:05 am	**10:15 am**	Address by Guest of Honor	**Guest of Honor** – Dr. Meghanshu Vashista, Associate Professor, Department of Mechanical Engineering, IIT, BHU
10:15 am	**10:50 am**	Address by Chief Guest	**Chief Guest** – Prof. (Dr.) M. P. Poonia, Vice Chairman, AICTE, New Delhi
10:50 am	**10:55 am**	Vote of Thanks	Prof. (Dr.) Ramesh Kumar Pachar, Principal, SKIT
10:55 am	**11:00 am**	Group Photo Session	
11:00 am	**11:30 am**	High Tea & Interaction	

Venue: JC Bose Seminar Hall **(Civil Block, SKIT)**

Date	Time	Event	Details
2/3/2020	9AM-11AM	Inaugural	J.C. Bose Auditorium
	11AM - 11:30AM	High Tea (Central Lawn)	
	11:30AM – 12:00PM	Lecture -1 **[Dr.S.L.Surana]**	***Topic: History of Optimisation*** *This session will provide chronological growth of optimization paradigms from early years to the present times. Optimization: how it is involved in day to day problems. Implications of optimized process on the performance of system?*
	12:00PM – 1:00PM	Lecture-2 **[Ms. Vishu Gupta]**	***Topic: Mathematical modelling in Engineering Systems*** *This session will provide an overview of mathematical modelling with focus on electrical engineering systems. Through examples, the steps of developing a mathematical model along with formulation of objective function will be demonstrated.*
	1:00PM – 2:00PM	*Lunch (Mess)*	
	2:00PM – 3:30PM	Lecture-3 **[Dr. Rajesh Kumar]**	***Topic: Linear Programming Problem and Its Mathematical Formulation*** *This session will provide an overview of Linear Programming Problems (LPPs) and their mathematical formulation. LPP is one of the most important Operations Research tools. It is widely used as a decision making aid in almost all industries. There can be various fields of application of LPP, in the areas of Economics, Computer Sciences, and Mathematics.*

Venue: JC Bose Seminar Hall (**Civil Block, SKIT**)

Date	Time	Event	Details
3-3-2020	9AM - 11:00AM	Lecture-4 [Dr. Rajeev Kumar Dohare]	***Topic: Non-Linear Optimization Problems.*** *This session will provide basic details of NLP, solution methodologies and case studies.*
	High Tea (J.C. Bose Seminar Hall)		
	11:30AM – 1:00PM	Lecture -5 [Dr. Vinay Pratap Singh]	***Topic: Luss Jakola and Differential Evolution Algorithms and their applications to power Systems.*** *The framework of Luss Jakola Optimization algorithm and Differential Evolution (DE) algorithm will be discussed in this session along with the applications to the power system.*
	Lunch (Mess)		
	2:00PM – 3:30PM	Lab Session [Dr. Rajesh Kumar]	***Computer Programming Lab (5FL7)*** *Topic: Basics of MATLAB and Optimization Tool Box.*

Venue: JC Bose Seminar Hall **(Civil Block, SKIT)**

Date	Time	Event	Details
4-3-2020	9AM - 11:00AM	Lecture-6 **[Dr. Rajesh Kumar]**	***Topic: Metaheuristics Techniques and Applications.*** *This session will throw light on introduction of well known metaheuristics like Genetic algorithm (GA), Particle Swarm Optimization (PSO) and Differential Evolution (DE). Along with the details of the operators used in optimization process.*
	High Tea (J.C. Bose, Seminar Hall)		
	11:30AM – 1:00PM	Lecture -7 **[Dr. Shail Dinkar]**	***Topic: A Case study on Modern Metaheuristic (Ant Lion Optimizer (ALO)) and development of its variants.*** *The session is aimed to introduce a comparatively new metaheuristic algorithm called Ant Lion Optimizer (ALO). Development of variants of th algorithm will be discussed in detail and their application domain pertaining to the modern control system will be explained.*
	Lunch (Mess)		
	2:00PM – 3:30PM	Lab Session **[Dr. Shail Dinkar]**	***Topic: Computer Programming Lab (5EL7)*** *Modern Metaheuristic Ant Lion Optimizer and Benchmark functions and their analysis.*

Venue: JC Bose Seminar Hall **(Civil Block, SKIT)**

Date	Time	Event	Details
5-3-2020	9AM - 11:00AM	Lecture-8 **[Dr. Ajay Sharma]**	***Topic: Artificial Bee colony: Development, Evolution, Progress and Applications.*** *This session will introduce Artificial Bee colony Algorithm to the participants. The participants will be able to understand the flow of algorithm and development of different variants will be discussed.*
	High Tea (J.C. Bose, Seminar Hall)		
	11:30AM – 1:00PM	Lecture -9 **[Dr. Shail Dinkar]**	***Topic: Model Order Reduction by using Ant Lion Optimizer (ALO).*** *The Session will provide solutions in the form of Model Order Reduction techniques for reducing the complexity of large and complex control systems with the help of ALO.*
	Lunch (Mess)		
	2:00PM – 3:30PM	Lab Session **[Dr. Dhanraj Chitara]**	***Topic: Computer Programming Lab (5FL7)*** ***Control System, Power System Analysis Tool box*** *The session is focused on hands on training on control system toolbox and (P-SAT) that includes analysis of complex higher order systems. Following analysis and work can be done at this lab session:* 1. *Linear Time Invariant Viewer Analysis* 2. *Stability Analysis* 3. *Design and implementation of compensators.*

Venue: JC Bose Seminar Hall **(Civil Block, SKIT)**

Date	Time	Event	Details
6-3-2020	9AM - 11:00AM	Lecture-10 **[Dr. Akhilesh Mathur]**	***Topic: Load flow studies of distribution systems and short circuit analysis.*** *The Session will be on short-circuit study of distribution system with inverter based DGs (IBDGs) IBDG, incorporating different voltage dependent control modes.* • *Analysis with voltage dependent loads.* • *Analysis in the event of multiple faults.*
	High Tea (J.C. Bose, Seminar Hall)		
	11:30AM – 1:00PM	Lecture -11 **[Dr. Manoj Gupta]**	***Topic: Case Studies on Application of optimization Techniques in research work pertaining to power system*** *The session will exhibit different case studies and will cover, theoretical aspects, problem formulation, application results and results. The session will also enable participants to renewable integration.*
	Lunch (Mess)		
	2:00PM – 3:30PM	Lab-Session **[Dr. Ajay Sharma]**	***Topic: Application of Metaheuristics for solving Power system problems.*** *The Session will throw light on the applications of different metaheuristics to solve various power system problems including load flow analysis, transmission network expansion planning and voltage stability analysis.*

Venue: JC Bose Seminar Hall **(Civil Block, SKIT)**

Date	Time	Event	Details
7-3-2020	9AM - 11:00AM	Lecture-12 [Dr. S. L. Surana]	***Topic: Economic Load Dispatch.*** *The session will throw light on various aspect of economic load dispatch problem of power system and will discuss*
	High Tea (J.C. Bose, Seminar Hall)		
	11:30AM – 1:00PM	Lecture -13 [Dr. J. C. Bansal]	***Topic: Spider Monkey Optimization*** *The session will provide knowledge of much discussed and cited algorithm Spider Monkey Optimization Algorithm and Its application to the power system problem. Relay coordination problem will also be discussed in this session. The session will be dedicated to nature inspired optimizers and their specific applications in power engineering domain.*
	Lunch (Mess)		
	2:00PM – 3:30PM	***Valedictory Function***	

Expected Outcomes:

- Program will provide a platform for leading academicians, researchers and faculty members to discuss and learn latest research in the area of optimization techniques and their applications.
- Program will be a proven beneficial platform for bridging the gap between the academia and the industry.
- Program will provide a platform for faculty members to share experience and exchange of ideas, with leading scientists and academicians.

Details of the Activity:

The one-week Short Term Training Programme on Optimization Techniques and Their Applications to Power Systems (OTAPS-2020) funded by AICTE was organized successfully with participation of faculty members of different fields at Swami Keshvanand Institute of Technology, Management & Gramothan under the aegis of Department of Electrical Engineering. This course was aimed for faculty members who are teaching various disciplines of science and engineering subjects linked with optimization in colleges or Universities. There were 51 number of participants registered for this programme from different Universities and Colleges of Rajasthan and 45 number of participants successfully completed the programme.

Prof M.P. Poonia, Vice-chairman (AICTE), New Delhi inaugurated the programme. In his address, Prof Poonia stressed upon the paradigm changes from black board based teaching to modern ICT base teaching and the importance of using online tools for teaching and evaluation in present days. He added importance of innovation in the field of engineering optimization.


तकनीकी शिक्षा के मूल्य निर्माण पर करना होगा फोकस

इनोवेशन ही हमें फिर टॉप पर ले जाएंगे : पूनिया

पत्रिका PLUS रिपोर्टर

जयपुर ◆ जगतपुरा स्थित स्वामी केशवानंद इंस्टीट्यूट ऑफ टेक्नोलॉजी मैनेजमेंट एवं ग्रामोत्थान में डिपार्टमेंट ऑफ मैकेनिकल इंजीनियरिंग, इलेक्ट्रिकल इंजीनियरिंग एवं इन्फॉर्मेशन टेक्नोलॉजी की ओर से एआइसीटीई द्वारा प्रायोजित सात दिवसीय शॉर्ट टर्म ट्रेनिंग प्रोग्राम्स की सोमवार को शुरुआत हुई।

डिपार्टमेंट ऑफ मैकेनिकल इंजीनियरिंग की ओर से कैड-कैम एवं एडवांस्ड मैन्यूफैक्चरिंग, इलेक्ट्रिकल इंजीनियरिंग द्वारा ऑप्टिमाइजेशन तकनीक एवं उनका पावर सिस्टम में उपयोग और इन्फॉर्मेशन टेक्नोलॉजी की ओर से इंटरनेट ऑफ थिंग्स विषय पर एक सप्ताह तक ये प्रोग्राम चलेंगे। कार्यक्रम में मुख्य अतिथि एआइसीटीई के वाइस चेयरमैन एमपी पूनिया, विशिष्ट अतिथि आइआइटी बीएचयू के मेधांशु वशिष्ठ, आइबीएम के मणिमधुकर, एमएनआइटी के राजेश कुमार, संस्थान के चेयरमैन सूरजाराम मील, डायरेक्टर जगदीश मील उपस्थित रहे।

इस दौरान एमपी पूनिया ने शिक्षकों से कहा कि वे तकनीकी शिक्षा के मूल्य निर्माण पर विशेष ध्यान रखें, जिससे देश की प्रगति को एक नया आयाम मिल सके। उन्होंने देश की अर्थव्यवस्था में इंजीनियर्स की भूमिका पर प्रकाश डाला। उन्होंने कहा कि देश को विश्व में फिर शिखर पर ले जाने के लिए किताबी ज्ञान से बाहर निकलकर इनोवेशन पर अधिक से अधिक फोकस करना होगा। ट्रेनिंग प्रोग्राम में देश के विभिन्न राज्यों के 150 प्रतिभागी हिस्सा ले रहे हैं।

Inaugural Ceremony of OTAPS-2020

Program Coordinator Professor Akash Saxena briefly introduced about the contents to be delivered during STTP and emphasized on the importance of the objectives of the course and possible outcomes. Further, Guest of honor Dr. Mani Madhukar, Program Manager - University Relations, IBM India Pvt. Ltd. Prof. (Dr.) Rajesh Kumar, HOD, Department of Electrical Engineering, MNIT Jaipur and Dr. Meghanshu Vashista, Associate Professor, Department of Mechanical Engineering, IIT, BHU gave a short motivational speech to the participants. Other officials of SKIT, including chairman, director and director academics welcomed all the participants for this course. The inaugural function was closed with the vote of thanks given by the Principal, Dr. Ramesh Kumar Pachar.

Inaugural Ceremony of OTAPS-2020

(Day-1)

Session-1 was delivered by Professor S. L. Surana where he talked about the development in the field of optimization and their implications to power system. Immediately after this session, an important lecture based on overview of mathematical modelling with focus on electrical engineering systems was taken by Ms. Vishu Gupta of NIT, Uttarakhand. She explained the content through examples, the steps of developing a mathematical model along with formulation of objective function were demonstrated to the participants. The last session of the day was taken

by Dr. Rajesh Kumar, MNIT, Jaipur. The session was based on Linear Programming Problem and Its Mathematical Formulation. The session was aimed to provide an overview of Linear Programming Problems (LPPs) and their mathematical formulation He discussed various fields of application of LPP, in the areas of Economics, Computer Sciences, and Mathematics.

Dr. Rajesh Kumar Delivering lecture on Linear Programming Problem

(Day-2)

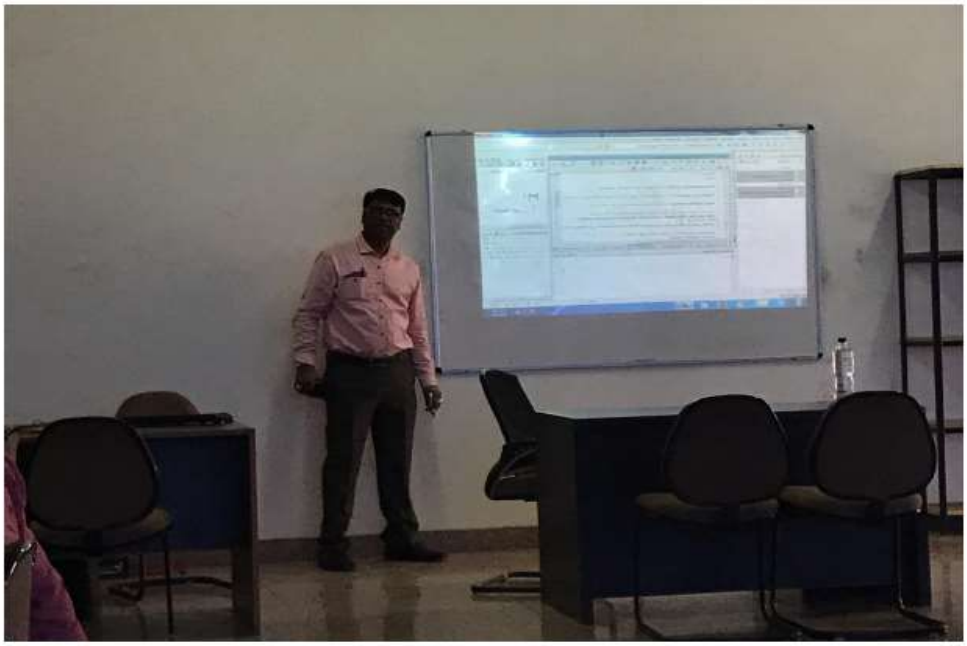
Day-2 started with a session on Non-Linear Optimization Problems by Dr. Rajiv Dohare, MNIT, Jaipur where he discussed basic details of NLP, solution methodologies and case studies. After this session, A Hands on session for design of experiment was taken by Mr. Sameer Imdad, where he emphasized on Taguchi method, ANOVA analysis and full factorial design of experiments. After this post high tea session was focused on Luss Jakola Optimization and differential evolution and that was taken by Dr. Vinay Pratap Singh (MNIT, Jaipur). The lab session was conducted by Ms. Vishu Gupta and Mr. Rahul Singhal at Computer Programming Lab (5FL7) on Basics of MATLAB and Optimization Tool Box.

(Day-3)

Day-3 started with a session on Metaheuristics Techniques and Applications. This session provided an introduction of well-known metaheuristics like Genetic algorithm (GA), Particle

Swarm Optimization (PSO) and Differential Evolution (DE). The session was taken by Dr. Rajesh Kumar, MNIT, Jaipur.

Further, A Case study on Modern Metaheuristic (Ant Lion Optimizer (ALO)) and development of its variants was discussed by Dr. Shail Dinkar, Govind Ballabh Pant Institute of Engineering and Technology. The session was aimed to introduce a comparatively new metaheuristic algorithm called Ant Lion Optimizer (ALO). Development of variants of the algorithm was discussed in detail and their application domain pertaining to the modern control system explained by Dr. Dinkar. Later, Lab session on Modern Metaheuristic Ant Lion Optimizer and Benchmark functions and their analysis was taken at Computer Programming Lab (5FL7) by Dr. Dinkar.



Lab session by Dr. Shail Dinkar on Ant Lion Optimizer and its Variants

(Day-4)

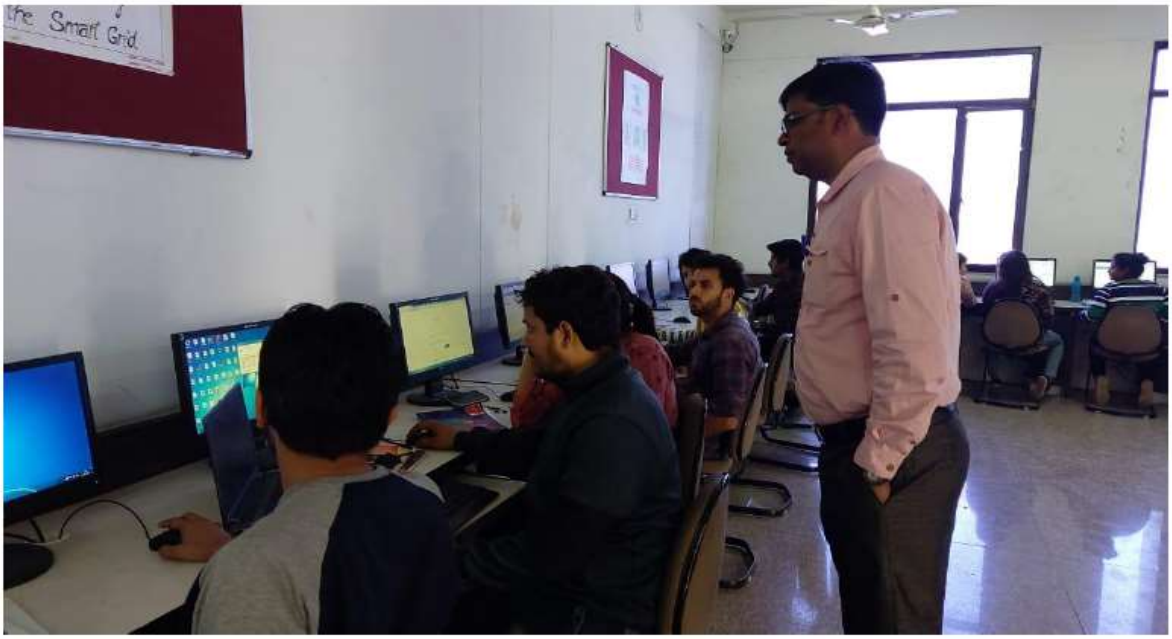
Dr. Ajay Sharma from Government Engineering College, Jhalwar taken a session on Artificial Bee colony: Development, Evolution, Progress and Applications. The participants were benefited with the knowledge to understand the flow of algorithm and development of different variants.

The next session was taken by Dr. Dinkar on Model Order Reduction by using Ant Lion Optimizer (ALO).Model Order Reduction techniques for reducing the complexity of large and complex control systems with the help of ALO were discussed in this session.

The Lab session of this day was taken by Dr. Dhanraj Chitara on Control System, Power System Analysis Tool box

The session was focused on hands on training on control system toolbox and (P-SAT) that includes analysis of complex higher order systems. Following analysis and work were done in this lab session:

1. Linear Time Invariant Viewer Analysis
2. Stability Analysis
3. Design and implementation of compensators.



Lab Session on Model Order Reduction

(Day-5)

The first session of the day 5 was taken by Dr. Akhilesh Mathur of MNIT, Jaipur on load flow studies of distribution systems and short circuit analysis. The Session was based on short-circuit study of distribution system with inverter based DGs (IBDGs) IBDG, incorporating different voltage dependent control modes. Dr. Mathur presented following case studies.

- Analysis with voltage dependent loads.
- Analysis in the event of multiple faults.

In second session of the day 5, Dr. Manoj Gupta from Poornima University presented case studies on Application of optimization Techniques in research work pertaining to power system

Different case studies were discussed that covered theoretical aspects, problem formulation, application results and results.

The last session of the day was taken on Application of Metaheuristics for solving Power system problems by Dr. Ajay Sharma (GEC, Jhalwar). Just after this session a lab session was conducted to provide hands on to the participants by Dr. Shalini Shekhawat and Mr. Ankit Vijay (SKIT, Jaipur).

Both of these sessions addressed the applications of different metaheuristics to solve various power system problems including load flow analysis, transmission network expansion planning and voltage stability analysis.

Lecture on Artificial Bee Colony and Teaching Learning Based Optimization Algorithm by Dr. Ajay Sharma

(Day-6)

The morning session was dedicated to the problems of real power system and was taken by Dr. S. L. Surana, Director (Academics), SKIT he presented three case studies and mathematical analysis on Dynamic Economic Load dispatch, Optimal Unit Commitment and Hydro thermal units coordination.

Further the session on Teaching Learning Based Optimization Methods and Spider Monkey Optimization were taken by Dr. Ajay Sharma. The session provided knowledge of much discussed

and cited algorithms by Indian Scientists SMO and TLBO and their applications to the power system problem.

Immediately after these two sessions a test based on the knowledge imparted was conducted. During compilation of the results and participants were asked to complete and give the feedback of the program. Analysis of the feedback taken was as under based on the marks given by the participants.

Lecture delivered by Dr. S. L. Surana on Real Power System Applications

After evaluation of the test, marks were announced and certificates were distributed. In view of the above, PEC committee submit the recommendation that STTP fulfils its prime objectives to bring the faculty members of different engineering, science and allied subjects onto one platform to update with the advances in the area of optimization and would be able to provide solid milieu for effective teaching learning practices, expose to modern simulation tools like MATLAB, its applications to power system problems and scientific approaches of planning and execution of experiments.

External Resource Persons

1. Dr. Rajesh Kumar MNIT,Jaipur
2. Dr. Jagdish Bansal South Asian University ,New Delhi
3. Dr. Rajeev Kumar Dohare MNIT,Jaipur
4. Dr. Ajay Sharma Government Engineering College, Jhalwar
5. Dr. Akhilesh Mathur MNIT,Jaipur
6. Dr. Vinay Pratap Singh MNIT,Jaipur
7. Dr. Shail Dinkar GB PANT Institute of Engineering and Technology
8. Dr. Manoj Gupta Poornima University, Jaipur
9. Ms. Vishu Gupta NIT, Uttarakhand

Internal Resource Persons

1. Dr. S. L. Surana
2. Dr. Dhanraj Chitara
3. Dr. Akash Saxena
4. Mr. Ankit Vijay
5. Dr. Shalini Shekhawat

No. of Participants 45

Attainment of Objectives

- Program provided a platform for leading academicians, researchers and faculty members to discuss and learn latest research in the area of optimization techniques and their applications.
- Program proven to a beneficial platform for bridging the gap between the academia and the industry.
- Program provided a platform for faculty members to share experience and exchange of ideas, with leading scientists and academicians.

Recommendation:

Such academic programs shall be conducted by Department of Electrical Engineering in future also.

Brochure:

STTP REGISTRATION FORM

OPTIMIZATION TECHNIQUES AND THEIR APPLICATIONS TO POWER SYSTEMS

(OTAPS-2020)
(02nd March - 07th March, 2020)

1.Name. .....
2.Designation.....
3.Qualifications.....
4.Department.....
5.Organization.....
6.Mobile.....
7.E-mail.....

Signature of Applicant

Endorsement from the Head of the Institution/Department

Prof./Dr./Mr./Ms.....
Department.....
Institute:.....is allowed to attend the STTP on "Optimization Techniques and their Applications to Power Systems" from 02nd March to 07th March, 2020 at SKIT, Jaipur.

Signature

Head of the Institution/Department.

Date: (Seal)

Course Coordinator
Prof. (Dr.) Akash Saxena
Mob:9672424999

Course Secretary
Dr. Dhanraj Chitara, Head, EE, Deptt, Mob: 9460107045
Dr. Rohit Mukherjee, Professor, Maths, Mob: 9414051576

Organizing Secretary
Mr. Abhishek Gupta, Associate Professor, EE, Mob:9462326804
Mr. Ankit Vijayvargiya, Associate Professor, EE, Mob: 7877709590
Mrs. Pooja Jain, Assistant Professor, EE, Mob:9785050506
Dr. Shalini Shekhawat, Assistant Professor,Maths, Mob: 9461628510

Send your Registration Form to:
Department of Electrical Engineering,
Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT), Ramnagaria, Jagatpura, Jaipur 302017
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Phone:+91-141-2752165, 5160400 Ext: 263

Short Term Training Programme
on
OPTIMIZATION TECHNIQUES AND THEIR APPLICATIONS TO POWER SYSTEMS

(OTAPS-2020)
02 - 07 March, 2020

Organized by

Department of Electrical Engineering
(NBA Accredited)
Swami Keshvanand Institute of Technology, Management & Gramothan , Jaipur - 302017

Course Coordinator
Prof. (Dr.) Akash Saxena
Professor
Department of Electrical Engineering

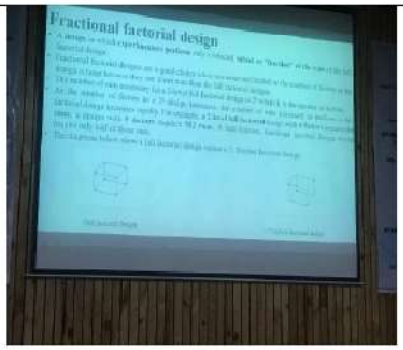
Sponsored By

All India Council for Technical Education, New Delhi

Glimpses of the sessions










AICTE Sponsored Short Term Training Programme
On
"Optimization Techniques and Their Applications to Power Systems"
(OTAPS-2020)
02nd – 07th March, 2020

List of Qualifying Participants

S.No.	Name of Qualifying Participant	Affiliation
1.	Mr.Ankit Kumar Sharma	University of Engineering & Management, Jaipur
2.	Dr. Monika Jain	JECRC University, Jaipur
3.	Dr. Pradip Kumar Gaur	JECRC University, Jaipur
4.	Dr. Shalini Kulshrestha	Jaipur Institute of Technology, Jaipur
5.	Ms. Vibha Kapoor	Jaipur Institute of Technology, Jaipur
6.	Mr.Atul Kumar Dadhich	Vivekananda Global University, Jaipur
7.	Mr. Mohit Kumar Jain	Vivekananda Global University, Jaipur
8.	Mr.Kapil Parikh	SITE, Nathdwara
9.	Mr. Mohammad Aarif	SITE, Nathdwara
10.	Mr. Vikas Pathak	Swami Keshvanand Institute of Technology, Management and Gramothan, Jaipur
11.	Dr. Nawal Kishor Jangid	Swami Keshvanand Institute of Technology, Management and Gramothan, Jaipur
12.	Dr. Tripati Gupta	Jaipur Engineering College and Research Centre, Jaipur
13.	Mr. Kuldeep Saini	Compucom Institute of Technology, Jaipur
14.	Mr. Raunak Jangid	Shrinathji Group of Institutions, Nathdwara
15.	Ms. Priya Rathore	NIET, Nathdwara
16.	Mr. Govind Rai Goyal	Vivekanand Global University, Jaipur
17.	Mr. Shiv Singh Choudhary	SITE, Nathdwara
18.	Mr. Himanshu Yadav	VCET,Bundi
19.	Mr. Nagendra Kumar Swamkar	Suresh Gyan Vihar University, Jaipur
20.	Dr. Bhanu Pratap Soni	University of Engineering & Management , Jaipur
21.	Mr. Ankit Sharma	University of Engineering & Management , Jaipur
22.	Mr. Ashish Raj	Poornima University, Jaipur
23.	Mr. Anand Sharma	Poornima University, Jaipur
24.	Mr.Satyaveer singh	Poornima University, Jaipur
25.	Surendra Sharma	Poornima University, Jaipur
26.	Shashank Sultaniya	Sangam University, Bhilwara
27.	Dr. Vinesh Agarwal	Sangam University, Bhilwara
28.	Neeraj Kumar Chhipa	Sangam University, Bhilwara
29.	Pankaj Kumar Mehta	Sangam University, Bhilwara
30.	Dr. Vishal Saxena	Jaipur Engineering College and Research Centre, Jaipur
31.	Dr. Vandana Agrawal	VIT, Jaipur

AICTE Sponsored Short Term Training Programme

On

"Optimization Techniques and Their Applications to Power Systems"

(OTAPS-2020)

02nd – 07th March, 2020

32.	Mr.Ravi Kumar Hada	Global Institute of Technology, Jaipur
33.	Dr. Rakesh Kumar Saxena	Global Institute of Technology, Jaipur
34.	Mr. Debabrato Mukherjee	Global Institute of Technology, Jaipur
35.	Mr. Pushpendra Joujdar	AIET, Jaipur
36.	Mr. Vikash Koundilya	AIET, Jaipur
37.	Dr. Sunil Kumar Goyal	Manipal University, Jaipur
38.	Mr. Mahipal Bukya	Manipal University, Jaipur
39.	Dr. Yudhveer Singh	Amity University, Jaipur
40.	Dr. Manmohan Singh Chauhan	Amity University, Jaipur
41.	Dr. Ravishanker Dubey	Amity University, Jaipur
42.	Mr. Hemraj Kumawat	Shri Bhawani Niketan Institute of Technology & Management, Jaipur
43.	Mr. Sunil Kumar	Shri Bhawani Niketan Institute of Technology & Management, Jaipur
44.	Mr. Neeraj Sharma	Vivekananda Global University, Jaipur
45.	Mr. Parmeshwar Kumawat	Vivekananda Global University, Jaipur

Dr. Akash Saxena

Program coordinator (OTAPS-2020)

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