One Week National Training Programme on

Renewable Energy: Special focus on Bioenergy

(2\textsuperscript{nd} March – 6\textsuperscript{th} March, 2020)

Organized by

Sardar Swaran Singh National Institute of Bio-Energy,

(An Autonomous Institution of Ministry of New and Renewable Energy, Govt. of India)

Jalandhar-Kapurthala Road, Wadala Kalan

Kapurthala 144601 (Punjab)
About SSS-NIBE

Sardar Swaran Singh National Institute of Bio-Energy (SSS-NIBE) is an autonomous Institution of the Ministry of New and Renewable Energy, Govt. of India. The vision of the Institute is to carry out state-of-the-art research and development, demonstration, testing and standardization activities, including human resource development at all levels, post-doctoral research and research for wide promotion of bioenergy in the country. SSS-NIBE is located in the state of Punjab on Jalandhar-Kapurthala Road, 18 km away from Jalandhar city towards Kapurthala. The Institute is located in between Punjab Technical University and Pushpa Gujral Science City. Jalandhar city is well connected by airways, railways and roadways with the nearest airport at Adampur and Amritsar.

Background

The Ministry of New and Renewable Energy (MNRE) has been supporting programmes for promoting renewable energy with a target of 175 GW power generation by 2022. Trained human resources are therefore inevitably required for all sectors of working including solar, wind, bioenergy, off-grid and grid power generation and biofuels for transport applications. Off grid applications through solar, hybrid systems of wind and biomass, waste for energy are also emerging as potential area not only for energy requirement but also for achieving sustainable development by mitigating climate change. Thus, there is a strong need to take up research and initiatives for technology development and demonstration to integrate renewable energy for various applications and sustainable development. The institute, being a research institute in Bio Energy is addressing the issues by developing technology and validating it in integrated manner as potential source of energy and for sustainable energy.

Learning Objective

The main objective of the national training programme is to introduce the importance and various applications of renewable energy including solar, wind and bioenergy, characterization of biomass and assessment, biomass gasification, fundamentals of solar, wind and biomass power generation, off-grid and grid power generation, waste utilization for energy production, financing for industrial projects and techno-economics for renewable energy projects and its utilization, including various policy issues to be addressed by various experts and Govt Officers.

Organizing Committee

Chairman: Shri Dinesh Dayanand Jagdale, Director General, SSS-NIBE & Joint Secretary, MNRE

Coordinators: Dr. Anil Kumar Sarma, Scientist E, SSS-NIBE
Dr. Sachin Kumar, Scientist C, SSS-NIBE

Convener: Dr. Nikhil Gakkhar, Scientist C, SSS-NIBE
Key note lectures

The key note lectures on the relevant topics will be delivered by the invited experts from R&D/Academic/Financing Institutions, Ministry, Industries and Scientists of the institutes.

Themes

✓ Applications of solar, wind, biomass and biogas
✓ Biomass characterization and resource assessment
✓ Biomass gasification
✓ Solar-Wind-Biomass Hybrid systems
✓ Renewable Energy for Commercial Applications
✓ Solar, wind, mini and micro hydro projects, energy storage.
✓ Field Experiences/ Success Stories
✓ Investment Opportunities in Renewable sector
✓ Site visit for industrial exposure

During the training programme, focus will be given on combination of lectures and practical sessions, including lab visits. Knowledge sharing with group discussions, interactions with experts, workshops, hands on training, case studies, etc. will be encouraged.

Target Audience

SNDs/SNAs/ BDTCs/ KVIC, Manufacturers of Bioenergy, wind and solar systems, Project Developers, Implementers, Consultants, Faculty, Researchers and students are welcome to participate in the training program. Only 40 seats are available, with only 15 seats under Student category, which will be filled on first come first serve basis. Preference will be given to applicants who are working in renewable energy sector. The interested candidates may send their willingness through e-mail. After confirmation, one need to send duly filled and signed registration form along with prescribed registration fee.

Important Dates

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
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<tbody>
<tr>
<td>Last date for early bird price</td>
<td>February 05, 2020</td>
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<tr>
<td>Last date of Registration (by email)</td>
<td>February 25, 2020</td>
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<tr>
<td>Last date of receipt of fees (by post)</td>
<td>February 29, 2020</td>
</tr>
<tr>
<td>Date of Training</td>
<td>2nd March – 6th March, 2020</td>
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### Training Fees (per participant)

<table>
<thead>
<tr>
<th>Category</th>
<th>Early Bird Fee – Before 05 Feb 2020</th>
<th>Late Registration Fee – After Feb 05, 2020</th>
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<tbody>
<tr>
<td>Students (Research Scholar, JRF/SRF etc.) (Only 15 seats reserved under this category)</td>
<td>Rs 5000/- (plus GST 18%, total = Rs 5900/-)</td>
<td>Rs 7000/- (plus GST 18%, total = Rs 8260/-)</td>
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<tr>
<td>Government organization, (SNA, PSU, Academic Institutes, etc)</td>
<td>Rs 10,000/- (plus GST 18%, total = Rs 11800/-)</td>
<td>Rs 12,000/- (plus GST 18%, total = Rs 14160/-)</td>
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<tr>
<td>Industry sponsored, stakeholders, Industry expertise, Entrepreneur, etc</td>
<td>Rs 15,000/- (plus GST 18%, total = Rs 17700/-)</td>
<td>Rs 17,000/- (plus GST 18%, total = Rs 20060/-)</td>
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### Payment Gateway

Participants are requested to make the payment through online mode only (RTGS/NEFT/Net banking):

Account details are as follows:

<table>
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<tr>
<th>ACCOUNT HOLDER NAME</th>
<th>SARDAR SWARAN SINGH NATIONAL INSTITUTE OF BIO ENERGY</th>
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<tbody>
<tr>
<td>ACCOUNT TYPE</td>
<td>SAVING ACCOUNT</td>
</tr>
<tr>
<td>BANK NAME</td>
<td>UNION BANK OF INDIA, 12, PARAM MARKET,OPP. CIRCUIT HOUSE,CIVIL LINES, GT RAOD, JALANDHAR-144001.</td>
</tr>
<tr>
<td>MICR CODE</td>
<td>144026002</td>
</tr>
<tr>
<td>ACCOUNT NO</td>
<td>308302010035555</td>
</tr>
<tr>
<td>IFSC Code :-</td>
<td>UBIN 0530832</td>
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### Terms and Conditions for the training programme

- The registration fees is non refundable.
- The registration fee includes access to all the lectures, certification, tea, lunch and dinner, accommodation in the institute guest house and plant visit.
- Accommodation will be on first come first serve basis and subject to the availability.
- Only participants (no accompanied person) will be allowed to stay in hostel.
- No request will be entertained for the stay in hostels before check in time and after check out time.
- No travelling allowance will be paid for reaching the programme venue.
- The participants will have to be regular and punctual, during the training period.
- Attendance is compulsory and certificate will be issued on successful completion of training programme subject to 100% attendance.
- In the event of any disputes arising, the decision of Director General, SSS-NIBE is final and is binding on the participants.

**How to apply**

The interested candidates may send their willingness through e-mail. After receiving confirmation from the convener, submit your registration form along with the payment details (Attached at Annexure - I) through email (nikhil.mnre@gmail.com) or through courier/speed post to:

**The Director General, Sardar Swaran Singh National Institute of Bio-Energy, Jalandhar-Kapurthala Road, Wadala Kalan, Kapurthala-144601 (Punjab) India.**

**Contact Details**

For queries related to training programme, you may contact

a) Dr. Sachin Kumar, Deputy Director, SSS-NIBE  
   E-mail: sachin.biotech@gmail.com Website: www.nibe.res.in  
   Phone No. 01822-507415/ 416; 09988864647/ 7009127569 (M); Fax No. 01822-255545

b) Dr. Nikhil Gakkhar, Scientist C, SSS-NIBE  
   E-mail: nikhil.mnre@gmail.com Website: www.nibe.res.in  
   Phone No. 01822-507417; 9818834416 (M)
One Week National Training Programme on
Renewable Energy: Special focus on Bioenergy
(2nd March – 6th March, 2020)

Registration Form

Name of the Participant : 

Designation/Affiliation : 

Address of the participant : 

State :  
Pincode :  

Email Id :  

Contact number :  

Area of Work/ Research: 

Organization details
Name of the organization :  

Address of the organization :  

Type of organization (SNDs/SNAs/ BDTCs/ KVIC/Consultancy/Institution/Industry):

Registration fee details: Demand Draft/ NEFT/IMPS
Amount :  
DD No/ NEFT / IMPS Number :  
Dated :  
Bank Name & Location :  

Accommodation Required : Yes/No

Date  
Place  

Signature of candidate

Affix a recent Passport size photograph (not older than 3 months)
One Week National Training Programme on Renewable Energy: Special Focus on Bioenergy

(2 – 6 March, 2020)

Venue: Sardar Swaran Singh National Institute of Bio-Energy (SSS-NIBE), Kapurthala

Program Schedule (Tentative)

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<tr>
<td>2 March 2020</td>
<td>Registration</td>
<td>Inauguration</td>
<td>Networking Break (Tea)</td>
<td>Session 1 (Bioenergy for power generation)</td>
<td>Lunch</td>
<td>Session 2 (Bio-CNG Processes)</td>
<td>Networking Break (Tea)</td>
<td>Session 3 (Biogas Technology)</td>
<td>Session 4 (Biomass Characterization)</td>
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<tr>
<td>3 March 2020</td>
<td>Session 5 (Govt Policies on Biogas)</td>
<td>Session 6 (Govt Policies on Waste to Energy)</td>
<td>Session 7 (Biomass Gasification)</td>
<td>Session 8 (Biofuels)</td>
<td>Visits to Laboratories in R&amp;D I, R&amp;D II, R&amp;D III, Biomass Cookstove test centre, Biomass Gasifier demonstrative plant.</td>
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<tr>
<td>4 March 2020</td>
<td>Visit to industrial and demonstration plant nearby (TBA)</td>
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*The confirmations from experts are awaited. The final program will provide information about detailed session topics*