



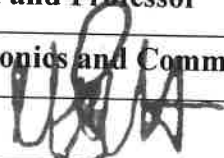
# Bharath Institute of Higher Education and Research

[Declared Under Section 3 of UGC Act, 1956]



Chennai – 600 073

## INTERNAL QUALITY ASSURANCE CELL (IQAC)

### DOCUMENTS SUBMISSION FORM

<b>Date of Submission</b>	21.08.2019
<b>Type of Documents</b>	SEMINAR
<b>Description</b>	<b>Large Scale Power Generation Using Fuel Cell</b>
<b>Enclosures</b>	a) REQUISITION LETTER b) PERMISSION LETTER c) ACCEPTANCE LETTER d) PROGRAM SCHEDULE e) CIRCULAR f) INVITATION g) PARTICIPATION LIST h) BROCHURE i) CERTIFICATE j) FEEDBACK FORM
<b>No. of Pages</b>	14
<b>Submitted By</b>	<b>Name : Dr.M.SANGEETHA</b> <b>Designation : Head and Professor</b> <b>Department : Electronics and Communication Engineering</b> <b>Signature :</b> 

### For Office Use Only

<b>Verified By:</b>	<i>K. Saktivel</i>	<b>Sign:</b> 	<b>Date:</b> 21/8/2019
<b>Uploaded By:</b>	<i>K. Senthil Kumar</i>	<b>Sign:</b> 	<b>Date:</b> 21/8/2019
<b>File Name:</b>	<i>SEMI - SEE - ECE - 2019 - 2020 - 06</i>		





# Bharath

**INSTITUTE OF HIGHER EDUCATION AND RESEARCH**  
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)



**BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY**  
No.173, Agharam Road, Selaiyur, Chennai , T.N - 600 073.

## REQUISITION LETTER

08.07.2019

FROM

The HOD

Department of ECE

Bharath Institute of Higher Education and Research  
Selaiyur, Chennai-73

TO

The Dean Engineering

Bharath Institute of Higher Education and Research  
Selaiyur, Chennai-73

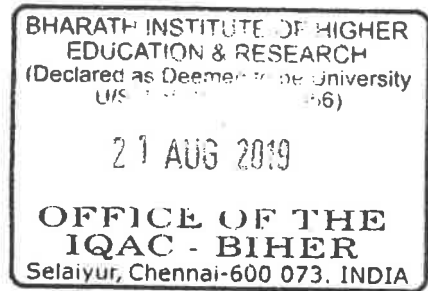
Respected Sir,

Subject: Requisition for conducting a seminar on "Large Scale Power Generation Using Fuel Cell" -  
Regarding.

The School of Electrical Engineering has planned to conduct a Seminar on the topic "Large Scale Power Generation Using Fuel Cell" dated on 09.08.2019 between 9.30 AM to 4.30 PM. In this regard, I request you to kindly grant permission for conducting the same.

Thanking You

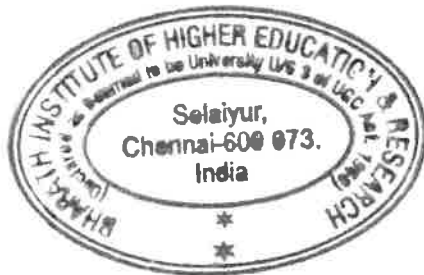
HOD/ECE



**Dean Engineering**

**DEAN (Engineering)**

Bharath Institute of Science & Technology  
BHARATH INSTITUTE OF HIGHER EDUCATION & RESEARCH  
(Declared as Deemed to be University U/S 3 of UGC Act. 1956)  
Selaiyur, Chennai-600 073.





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**BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY**  
No.173, Agharam Road, Selalyur, Chennai , T.N - 600 073.

22.07.2019

From  
The HOD,  
Department of ECE,  
School of Electrical Engineering,  
BIHER.

To  
B.Ravikumar,  
Senior Manager,  
L & T Pvt. Ltd,  
Bangalore – 636001.

Respected sir,

Sub:-The Department of Electronics and Communication Engineering, School of Electrical Science, BIHER, proposed to conduct a seminar in “Large Scale Power Generation Using Fuel Cell”- Permission requested to deliver an invited talk – Reg.

In the continuation of telephonic conversation, it is requested to deliver an invited talk in “Large Scale Power Generation Using Fuel Cell“on 09.08.2019.Kindly accept our request and do the needful .

**Convener**  
**Dr.M.Sangeetha,**  
**HOD/ECE**



**Bharath**  
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**BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY**  
No.173, Agharam Road, Selsiyur, Chennai , T.N - 600 073.

**DEPARTMENT OF ECE**

**Program Schedule**

**09/08/2019(Friday)**

<b>09.30 - 10.00 AM</b>	<b>Inaugural Address</b>
<b>09.30 AM</b>	<b>Welcome Address Dr.M.Sangeetha</b>
<b>09.35 AM</b>	<b>About the Seminar Ms.G.Jeyalakshmi</b>
<b>09.40AM</b>	<b>Introduction of the Chief Guest Dr.S.Arulsevi</b>
<b>09.45 AM</b>	<b>Inaugural address by Chief Guest B.Ravikumar, Senior Manager, L &amp; T Pvt. Ltd, Chennai.</b>
<b>10.00 AM Onwards</b>	<b>Invited Talk B.Ravikumar, Senior Manager, L &amp; T Pvt. Ltd, Chennai.</b>
<b>12.30-1.30 PM</b>	<b>Lunch break</b>
<b>1.45-03.00pm</b>	<b>Presentation</b>

**Valedictory program**

<b>03.30-04.00PM</b>	<b>Valedictory Function</b>
<b>04.00-04.20PM</b>	<b>Vote of Thanks (Coordinator)</b>



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**BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY**  
No.173, Agharam Road, Selaiyur, Chennai , T.N - 600 073.

**CIRCULAR**

**SCHOOL OF ELECTRICAL ENGINEERING**

**Date: 31.07.2019**

The School of Electrical Engineering, Department of ECE, BIHER is glad to conduct a Seminar on “**Large Scale Power Generation Using Fuel Cell**” dated on 09.08.2019 between 9.30AM to 4.30PM. Those who are interested to participate do register your name with the program coordinator mentioned below.

**Resource Person:**

**B.Ravikumar,**  
**Senior Manager,**  
**L & T Pvt. Ltd,**  
**Chennai.**

**Convener:**

**Dr.M.Sangeetha,**  
**HOD/ECE**

**Program Coordinator:**

**Mrs.G.Jeyalakshmi**  
**Assistant Professor**

**Email:jeyalakshmig99@gmail.com**

**Contact no:9840976989 Convener**

**Dr.M.Sangeetha, HOD/ECE**

# INVITATION



**Bharath**  
INSTITUTE OF HIGHER EDUCATION AND RESEARCH  
Chartered as deemed to be University u/s 3 of the UOU Act, 1956

School of Electrical Engineering  
Department of ECE  
BHARATH Institute of Higher Education and Research  
SELAIYUR, CHENNAI-600073

*Seminar on*  
**"Large Scale Power Generation Using Fuel Cell"**

Resource Person : Dr.B.Ravi Kumar  
Senior Manager, L & T Limited, Chennai  
Keynote Address : Dr J.Hameed Hussain  
Dean Engineering, BIHER, Chennai  
Special Address : Dr. M.Sangeetha  
Professor & Head, Department of ECE, Chennai  
Program Coordinator : Mrs.G.Jeyalakshmi  
Assistant Professor, BIHER, Chennai

**Venue:**

**Smart Room, ECE, BIHER**

**Date & Time:**

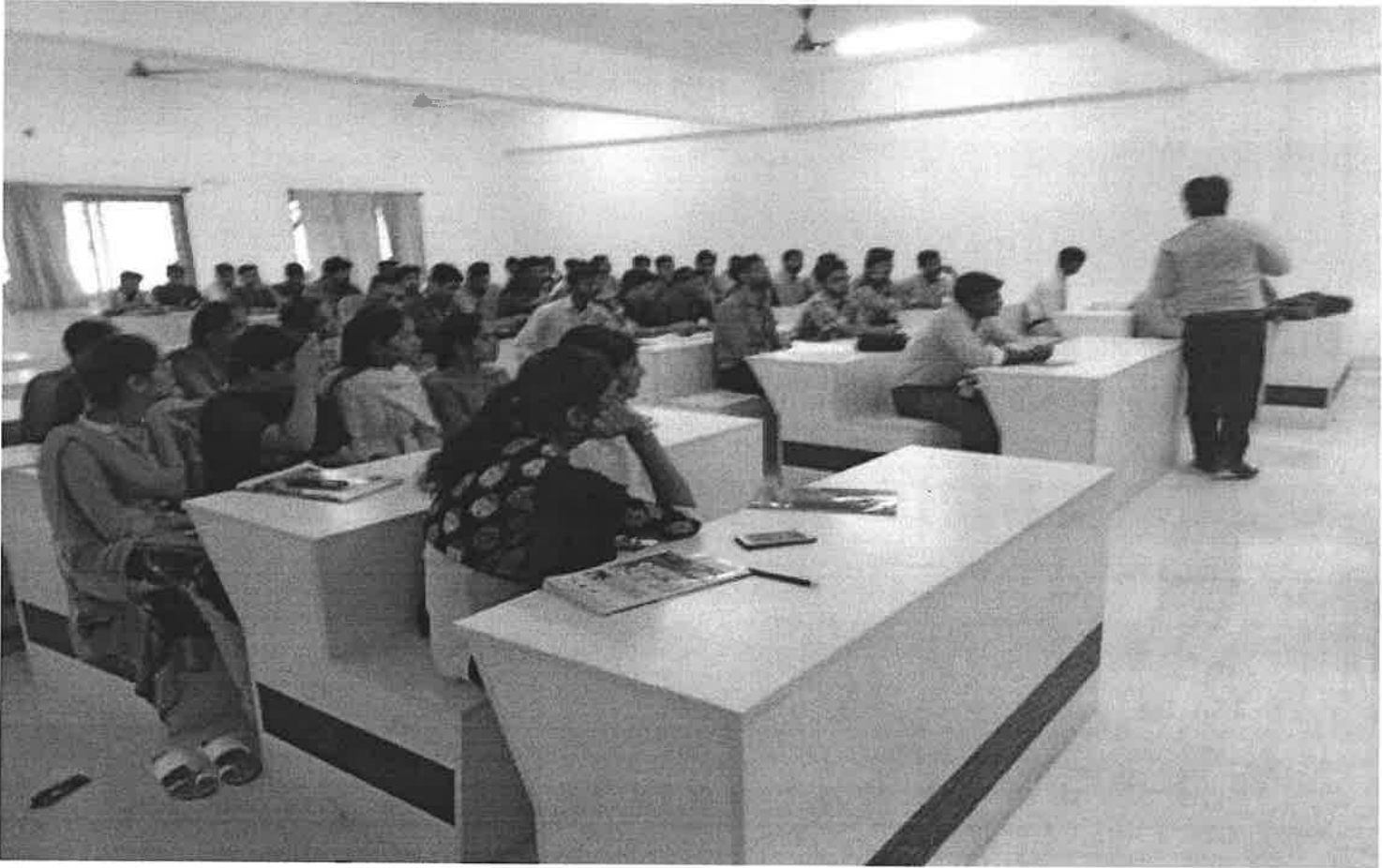
**09<sup>th</sup> AUGUST 2019; 9.30 AM-04.30 PM**

**Bharath Institute of Higher Education and Research**  
**Department of ECE**  
**PARTICIPANTS LIST**  
**Total No. Of Students=40**


<b>S.NO.</b>	<b>NAME OF THECANDIDATE</b>	<b>Name of the Department &amp; College</b>
1	ARCHANA.R	ECE, Bharath Institute of Higher Education and Research
2	AMARJEET KUMAR	ECE, Bharath Institute of Higher Education and Research
3	ANNAPANENI VAMSIDHAR	ECE, Bharath Institute of Higher Education and Research
4	AARTHI.P	ECE, Bharath Institute of Higher Education and Research
5	CHANDRALEKA.K	ECE, Bharath Institute of Higher Education and Research
6	CHINTA ANVESH	ECE, Bharath Institute of Higher Education and Research
7	DEBAJIT HAZARIKA	ECE, Bharath Institute of Higher Education and Research
8	GOKUL.S	ECE, Bharath Institute of Higher Education and Research
9	GUNDA VENKATA MEHAR VINAY	ECE, Bharath Institute of Higher Education and Research
10	GUTTA MOHAN RANGA RAO	ECE, Bharath Institute of Higher Education and Research
11	HARSHA VARDHAN .K	ECE, Sri Venkateshwara Engineering and Technology, Chennai
12	INDU GOPI.R	ECE, Dhanalakshmi college of Engineering and Technology, Chennai
13	KRISHNA.S	ECE, Sai Ram College of Engineering and Technology, Chennai
14	S. VEERA LAKHSMI	ECE, Sri Venkateshwara Engineering and Technology, Chennai
15	SURAJ SAH	ECE, Sri Venkateshwara Engineering and Technology, Chennai
16	SABITA KUMARI	ECE, Sri Venkateshwara Engineering and Technology, Chennai
17	M.MANIKANTA	ECE, Sri Venkateshwara Engineering and Technology, Chennai
18	M. RAJ KUMAR	ECE, Sri Venkateshwara Engineering and Technology, Chennai
19	MD.FAIYAZ ALAM	ECE, Dhanalakshmi college of Engineering and Technology, Chennai
20	MOHAMED KASHIFUDDIN.B	ECE, Dhanalakshmi college of

		Engineering and Technology, Chennai
21	S. KARTHIK	ECE, Dhanalakshmi college of Engineering and Technology, Chennai
22	SANKIRTH KUMAR.B	ECE, Dhanalakshmi college of Engineering and Technology, Chennai
23	NARESH .I	ECE, Dhanalakshmi college of Engineering and Technology, Chennai
24	PALAPARTHI RAMBABU.E	ECE, Dhanalakshmi college of Engineering and Technology, Chennai
25	P.VIJAYA BHARGAVI	ECE, Sai Ram College of Engineering and Technology, Chennai
26	I. BHARATHI	ECE, Sai Ram College of Engineering and Technology, Chennai
27	A.MANOJ DEEP	ECE, Sai Ram College of Engineering and Technology, Chennai
28	PRANAY KUMAR.G	ECE, Sai Ram College of Engineering and Technology, Chennai
29	T. ANUSHA	ECE, Sai Ram College of Engineering and Technology, Chennai
30	SOWMYA .V	ECE, Sai Ram College of Engineering and Technology, Chennai
31	SAI MOHAN.R	ECE, Sai Ram College of Engineering and Technology, Chennai
32	K. AKHIL	ECE, Sai Ram College of Engineering and Technology, Chennai
33	N. KUMAR	ECE, Sai Ram College of Engineering and Technology, Chennai
34	SRILATHA.L	ECE, Dhanalakshmi college of Engineering and Technology, Chennai
35	SWETHAA SHREE.S	ECE, Dhanalakshmi college of Engineering and Technology, Chennai
36	THILLAI VANI.S	ECE, Dhanalakshmi college of Engineering and Technology, Chennai
37	UMA MAHEEWARY.L	ECE, Sri Venkateshwara Engineering and Technology, Chennai
38	SAHITHYA.L	ECE, Sri Venkateshwara Engineering and Technology, Chennai
39	VENKATESH BABU.B	ECE, Sri Venkateshwara Engineering and Technology, Chennai
40	S. ANAND	ECE, Sri Venkateshwara Engineering and Technology, Chennai

**Bharath Institute of Higher Education and Research  
Department of ECE**



**One day Seminar on “Large Scale Power Generation Using Fuel Cell” on 09.08.2019**

<b>Registration form:</b> <b>Name :</b> <b>Designation:</b> <b>Name of the Title :</b>  <b>Area of Research :</b> <b>Organisation :</b> <b>Address for Communication :</b>	<b>Advisory Committee:</b> <b>Dr.J.Sandeep Anand</b> <b>Chancellor/BIHER</b> <b>Dr.S.Sweetha Anand</b> <b>Managing Director/BIHER</b> <b>Dr.V.Kanagasabai</b> <b>Vice chancellor/BIHER</b>	  <b>Bharath</b> <small>INSTITUTE OF HIGHER EDUCATION AND RESEARCH</small> <small>Autonomous Institute of Higher Education U.P.C.E.R.T.</small>
<b>Contact No:</b> <b>Gmail :</b> <b>Category : PG</b> <b>students/Research</b> <b>Scholar/Faculty/Industrial</b> <b>person</b>	<b>Co Patron</b> <b>Dr.K.PTheoyamani</b> <b>Pro vice chancellor/BIHER</b> <b>Dr.J.Hameed Hussain</b> <b>Dean Engineering /BIHER</b> <b>Dr.M.Sundararajan</b> <b>Dean School of Electrical</b> <b>science/BIHER</b>	<b>BHARATH INSTITUTE OF HIGHER</b> <b>EDUCATION AND RESEARCH</b> <b>373, Appaiah road, Selvapur,</b> <b>Chennai-600073</b>
<b>Payment Details :</b>  <b>D.D No/ Date :</b> <b>Drawn on Bank :</b> <b>Amount :</b>	<b>Convener</b> <b>Dr.M.Sangoetha</b> <b>Professor &amp; HOD/ECE</b>	<b>National Seminar</b> <b>ON</b> <b>"Large Scale Power</b> <b>Generation Using Fuel</b> <b>Cell"</b> <b>09<sup>th</sup> August 2019</b> <b>Organized</b> <b>by</b>
<b>Signature    Head of Institution</b>	<b>Program Committee:</b> <b>Mrs.G.Jeyalalshmi</b> <b>Assistant Professor/ECE</b>	<b>DEPARTMENT OF ELECTRONICS</b> <b>AND COMMUNICATION</b> <b>ENGINEERING</b> <b>In association with</b>
<b>Date :</b> <b>{Photo copies of the form</b> <b>accepted}</b>	<b>Technical Committee:</b> <b>Dr.S.Philomina</b> <b>Assistant Professor/ECE</b> <b>G.Jeyalalshmi</b> <b>Assistant Professor/ECE</b>	
	<b>Organizing Secretary:</b> <b>S. Sandeep</b> <b>Student of ECE</b> <b>K.Ajzy</b> <b>Student of ECE</b>	<a href="http://www.bharathuniv.ac.in">www.bharathuniv.ac.in</a>

**About the University:**

The first self-financing Engineering College in the name of Bharath Institute of Science and Technology (BIST) was started in Tamil Nadu in 1984 by Sri Lakshmi Ammal Educational Trust, established by the academic visionary Dr.S.Jagathraishalan.

Bharath University and is known for providing high quality education to around 10000 students from across the world in multi-stream. The institute facilitates the guidance of 1300 teaching faculty members to provide guidance to do Undergraduate, Postgraduate programs and to facilitate Ph.D. research.

**About the Department:**

Electronics and Communication Engineering (ECE) is a swiftly advancing field, with new ideas emerging every other seconds. Graduate engineers in this discipline will be equipped to design and fabricate, install, operate and maintain complex electronic circuits, equipment's and systems.

The course also covers designing security in communications, besides all the software and hardware required in the communication domain.

**About the Seminar:**

The thermodynamic potential of the integration of molten carbon fuel cell (MCFC) technology with gas turbine systems for small scale (sub megawatt or sub MW) as well as large scale (multi MW) hybrid cycles. Following the proposals of two important MCFC manufacturers, two plant layouts are discussed, the first based on a pressurized, externally reformed MCFC and a recuperated gas turbine cycle and the second based on an atmospheric MCFC, with internal reforming integrated within an externally fired gas turbine cycle.

**Seminar Structure:**

Introduction  
Comparison of Sub MW Hybrid Power Plants  
Multi-MW Scale Hybrid Plant Analysis  
Conclusions  
Nomenclature

**Practical Sessions - Open based on experience by**

1. Developing simple sub-routines and compiling them
2. Using in built libraries to solve common engineering problems
3. Exploring different methods of visualizing the outcomes (PCB layout, etc.)
4. Solving industry related engineering problems and deriving solutions.

**Brainstorming session - Solve an assigned problem covering the entire topics on your own at the venue to assess your learning.**

The Research scholars and students, Faculties can confirm their registration by sending the DD. The DD should take in favour of "BIHER Chennai" before 15.10.2017, beside of DD carry full name, contact number and address of the author.

Selected candidates list announced through email. Accommodation shall be arranged on request at a reasonable cost.

**Dates to be Remember :**

Last date for Registration: 29/07/2019

Short Listed candidates list announcement: 31/07/2019

**Registration fee details:**

Students : Rs.250/-

Research scholars &

Staff members : Rs.500/-

Industry Person : Rs.750/-



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No.173, Agharam Road, Selalyur, Chennai , T.N - 600 073.

**Bharath Institute of Higher Education and Research**  
**Department of ECE**  
**CERTIFICATE**



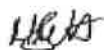
**Bharath**  
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ACCREDITED WITH 'A' GRADE BY NAAC

**SCHOOL OF ELECTRICAL ENGINEERING**

**CERTIFICATION OF PARTICIPATION**

This is to certify that Mr. KRISHNA.S has attended a Seminar on "Large Scale Power Generation Using Fuel Cell" Organized by the Department of Electronics and Communication Engineering, BIHER conducted on 09/08/2019.

  
COORDINATOR  
Mrs.G.Jeyalakshmi

  
CONVENOR  
Dr. M. Sangeetha



**SCHOOL OF ELECTRICAL ENGINEERING**  
**FEEDBACK FORM**

**SEMINAR ON LARGE SCALE POWER GENERATION USING FUEL CELL**

FEED BACK FORM		Date: 09.08.2019				
Name	S. Karthik					
Phonenumber	9523107281					
	Poor	Fair	Good	Very Good	Excellent	
Overall Program			✓			
Seminar's objective were stated clearly and met?				✓		
Audio,Visual Aids Technology used			✓			
Presentation hand outs					✓	
Seminar enhances your Studies/Research?				✓		
The information presented was useful?			✓			
The speaker was engaging and Knowledgeable?				✓		

*Karthik*  
**Student Signature**



# Bharath

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No.173, Agharam Road, Selalyur, Chennai , T.N - 600 073.

## SCHOOL OF ELECTRICAL ENGINEERING FEEDBACK FORM

### SEMINAR ON LARGE SCALE POWER GENERATION USING FUEL CELL

FEED BACK FORM		Date:09.08.2019			
Name	N. kumar				
Phonenumber	8213571204				
	Poor	Fair	Good	Very Good	Excellent
Overall Program				✓	
Seminar's objective were stated clearly and met?			✓		
Audio,Visual Aids Technology used			✓		
Presentation hand outs				✓	
Seminar enhances your Studies/Research?				✓	
The information presented was useful?			✓		
The speaker was engaging and Knowledgeable?					✓

  
Student Signature