

# MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE GWALIOR (M.P.)



## CHEMICAL ENGINEERING DEPARTMENT

Volume 5 / Issue 4

OCT 2022 – DEC 2022

### VISION

To be a leader in Chemical Engineering Education and Research by providing balanced learning and fostering research to enable the learners to meet the challenges of process industries and societal needs.

### MISSION

- Share state of the art knowledge and facilities and enable optimal utilization of the resource in the region.
- To adopt good pedagogical practices and ethics in order to achieve excellence.
- Develop research culture and create a platform to disseminate research and development

### ABOUT THE DEPARTMENT

The Chemical Engineering Department was started in 1996 it offers B.E. and MTech. courses in Chemical Engineering. Department was started with 30 students in undergraduate but latter on realizing the importance and need for Chemical Engineers, intake capacity raised to 60 in 2013-14. MTech. Course was started in 2013-14 with specialization in Chemical Engineering. The Department started with vision developing itself into academic excellence in Chemical Engineering and associated areas in order to develop competitive professionals and experts having knowledge, skills and attitude to serve the society and nation.

### PROGRAMME EDUCATIONAL OBJECTIVES (PEOS)

- PEO1: Develop innovative products and services in the field of Chemical Engineering and Allied Engineering disciplines.
- PEO2: Make use of Chemical Engineering with modern experimental and computational skills in higher education and research.

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**ACADEMIC  
ACTIVITIES  
(CONFERENCES  
& SEMINARS)**

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1. [One Day Conference]

**Online interaction session was conducted** on the occasion of Child Rights Day in institute. Dr. Nusrat Ali Rizvi, Assistant Professor, Dept of Law, MLB Govt. Arts & Commerce College, Gwalior conducted the session.

Dated: (20 Nov 2022)

Inter Department College Level.

 **MADHAV INSTITUTE OF TECHNOLOGY & SCIENCE GWALIOR**  
(A Govt. Aided UGC Autonomous & NAAC Accredited Institute Affiliated to RGPV, Bhopal)

Press Esc to exit full screen

Celebration  
of  
**"Child Rights Day"**

**Online Interaction Session with**  
**"Dr. Nusrat Ali Rizvi"**  
(Asst. Professor, Dept. of Law, MLB Gwalior)

**20<sup>th</sup> November 2022, 10:30am**

Registration link:- <https://docs.google.com/forms/d/e/1FAIpQLSdRgQoIzmAugQ2sYiznYXiBRQsbRBSp2cVEssDD.14Nu47g/viewform>

**Meeting link: <https://meet.google.com/drr-oxdi-rme>**

**Faculty Coordinators**  
Prof. Anish P. Jacob ([anishjaco@mitsgwalior.in](mailto:anishjaco@mitsgwalior.in))  
Prof. D. K. Parsediya ([parsediya@mitsgwalior.in](mailto:parsediya@mitsgwalior.in))

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**STUDENT CLUB  
ADTIVITIES  
ORANIZED**

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Name of the Club	Faculty Coordinator	Date	Details	Duration	Level
<b>Chemical Engineering Club</b>	Dr. Rakesh Kumar Dubey	26 Nov 2022,	ChemHunt: Treasure Hunt and Quizround (Interdepartmental MITS)	1 Day	Inter Departments
<b>Chemical Engineering Club</b>	Dr. Rakesh Kumar Dubey	15 oct 2022	A seminar on "Fundamental and Application on MATLAB" by Dr. A. Mishra (Asst. Professor, NIT Calicut)	05:00 hours	Inter Departments

**NPTEL/ATAL/IENTE  
RSALA COURSE  
ATTENDED BY THE  
FACULTY**

Courses	Name of Faculty	Details of Course
NPTEL COURSE	(Anish P. Jacob)	<p>1. Successfully completed the 8 weeks NPTEL course on “Colloids &amp; Surfaces”.</p> <p>2. Got Elite +Silver certificate in 12 weeks NPTEL course on “Hydrogen Energy: Production, Storage, Transportation and Safety”</p>



## NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to  
**ANISH P JACOB**  
for successfully completing the course

### Colloids and Surfaces

with a consolidated score of **55** %

Online Assignments	25/25	Proctored Exam	30/75
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Total number of candidates certified in this course: **8**

*Devendra Jalihal*  
**Prof. Devendra Jalihal**  
Chairperson,  
Centre for Outreach and Digital Education, IITM

Jul-Sep 2022  
(8 week course)

*Andrew Thangaraj*  
**Prof. Andrew Thangaraj**  
NPTEL, Coordinator  
IIT Madras



Indian Institute of Technology Madras



Roll No: NPTEL22CH42S13600002

To validate the certificate



No. of credits recommended: 2 or 3



Elite

# NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to

**ANISH P JACOB**

for successfully completing the course

## Hydrogen Energy: Production, Storage, Transportation and Safety

with a consolidated score of **83** %



Online Assignments	25/25	Proctored Exam	57.92/75
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Total number of candidates certified in this course: **322**

Jul-Oct 2022  
(12 week course)

*Sridhar*  
**Prof. Sridhar Iyer**  
Head CDEEP & NPTEL Coordinator  
IIT Bombay



Indian Institute of Technology Bombay



Roll No: NPTEL22CH66553650007

To validate the certificate



No. of credits recommended: 3 or 4

Courses	Name of Faculty	Details of Course
NPTEL COURSE	(Dr. Shourabh Singh Raghuwanshi)	<ol style="list-style-type: none"> <li>1. Successfully completed the 12 weeks NPTEL course on “Chemical Process Safety”.</li> <li>2. Got Elite certificate in 12 weeks NPTEL course on “ Basic Environmental Engineering and Pollution Abatement”</li> <li>3. Successfully completed the 12 weeks NPTEL course on “Heat Exchangers: Fundamentals and Design Analysis”.</li> </ol>



# NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to  
**SHOURABH SINGH RAGHUWANSHI**  
for successfully completing the course

## Chemical Process Safety

with a consolidated score of **58** %

Online Assignments	22.1/25	Proctored Exam	36.15/75
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Total number of candidates certified in this course: **449**

**Prof. Sanjeev Manhas**  
Coordinator, Continuing Education Centre  
IIT Roorkee

Jul-Oct 2022  
(12 week course)

**Prof. Priti Maheshwari**  
NPTEL Coordinator  
IIT Roorkee



Indian Institute of Technology Roorkee



Roll No: NPTEL22CH44S63620378

To validate the certificate



No. of credits recommended: 3 or 4



# Elite NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to  
**SHOURABH SINGH RAGHUWANSHI**  
for successfully completing the course

## Basic Environmental Engineering and Pollution Abatement

with a consolidated score of **67** %

Online Assignments	25/25	Proctored Exam	41.67/75
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Total number of candidates certified in this course: **1250**

**Prof. Sanjeev Manhas**  
Coordinator, Continuing Education Centre  
IIT Roorkee

Jul-Oct 2022  
(12 week course)

**Prof. Priti Maheshwari**  
NPTEL Coordinator  
IIT Roorkee



Indian Institute of Technology Roorkee



Roll No: NPTEL22CH45S33620389

To validate the certificate



No. of credits recommended: 3 or 4



# NPTEL Online Certification

(Funded by the MoE, Govt. of India)



This certificate is awarded to  
**SHOURABH SINGH RAGHUWANSHI**  
for successfully completing the course

## Heat Exchangers: Fundamentals and Design Analysis

with a consolidated score of **50** %

Online Assignments	20/25	Proctored Exam	30/75
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Total number of candidates certified in this course: **41**

Jul-Oct 2022  
(12 week course)

**Prof. Debjani Chakraborty**  
Coordinator, NPTEL  
IIT Kharagpur



Indian Institute of Technology Kharagpur



Roll No: NPTEL22ME106S43620562

To validate the certificate



No. of credits recommended: 3 or 4

**FDP/STC ATTENDED  
(OUTSIDE THE  
INSTITUTE)**

Courses	Name of Faculty	Details of Course
<b>FDP/STC ATTENDED BY NPTEL COURSE</b>	(Dr. Shourabh Singh Raghuwanshi)	<ol style="list-style-type: none"> <li>1. Got Elite certificate in 12 weeks FDP course on “ Basic Environmental Engineering and Pollution Abatement”</li> <li>2. Successfully completed the 12 weeks FDP course on “Heat Exchangers: Fundamentals and Design Analysis”.</li> </ol>





# NPTEL-AICTE Faculty Development Programme

(Funded by the MoE, Govt. of India)



This certificate is awarded to  
**SHOURABH SINGH RAGHUWANSHI**

for successfully completing the course

## Basic Environmental Engineering and Pollution Abatement

with a consolidated score of **67 %**

Prof. Andrew Thangaraj  
NPTEL Coordinator  
IIT Madras



(Jul-Oct 2022)

Roll No: NPTEL22CH45S33620389

Duration of NPTEL course : 12 Weeks

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams. This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 24<sup>th</sup> July 2018, similar to other refresher / orientation courses. F.No. AICTE / RIFD / FDP through MOOCs / 2017-18



# NPTEL-AICTE Faculty Development Programme

(Funded by the MoE, Govt. of India)



This certificate is awarded to  
**SHOURABH SINGH RAGHUWANSHI**

for successfully completing the course

## Heat Exchangers: Fundamentals and Design Analysis

with a consolidated score of **50 %**

Prof. Andrew Thangaraj  
NPTEL Coordinator  
IIT Madras



(Jul-Oct 2022)

Roll No: NPTEL22ME106S43620562

Duration of NPTEL course : 12 Weeks

The candidate has studied the above course through MOOCs mode, has submitted online assignments and passed proctored exams. This certificate is therefore acceptable for promotions under CAS as per AICTE notifications dated 24<sup>th</sup> July 2018, similar to other refresher / orientation courses. F.No. AICTE / RIFD / FDP through MOOCs / 2017-18



## **ONLINE FEEDBACK USING MOODLE**

The constraints of pen and paper method of receiving feedbacks are many, which render the whole process meaningless. The main constraints in this method are- cost of printing which increases with the increase in number of questions. Moreover, the students lose interest in filling those never-ending sheets of paper, and the sheets from the booklets also. In such scenario, the data obtained, from the feedback are not complete and are unreliable. In addition to that, this data can't be analyzed deeply, without investing tremendous amount of resources.

In such a scenario, this year, the student feedback about different Faculty member and courses has been obtained using an online platform, MOODLE. Use of MOODLE for obtaining feedback has resulted in overwhelming participation from students. Moreover, the completeness of data is also guaranteed. The length of feedback questionnaire can be increased without any problem. In addition to that, the data obtained can be analyzed in multitude ways, very easily.

## **INTRODUCTION OF NPTEL COURSES UNDER SWAYAM**

During the last few years, the awareness among engineering students about social media has increased exponentially. The inclination among present day students is towards learning from online platforms, where they can learn at their own pace in their own time, at a place of their choice. SWAYAM is an initiative whose motive is to exploit this tendency of students for online learning.

The lectures of the courses are available on YouTube platform, where a student can watch them and learn. These courses also include assignments given by Instructors assigned to these courses. These assignments are submitted using Google Classroom, which facilitates transparency and continuity in the evaluation of students. Moreover, a student receives prompt results.

## **EDITORIAL BOARD**

Advisor: [Dr. Shourabh Singh Raghuwanshi]

Composed by: [Mr. Yash Triwari]