## DEPARTMENT OF CERAMIC TECHNOLOGY ALAGAPPA COLLEGE OF TECHNOLOGY ANNA UNIVERSITY:: CHENNAI 600 025

# MINUTES OF THE DEPARTMENTAL CONSULATATIVE COMMITTEE (DCC) MEETING HELD ON 05<sup>th</sup> AUGUST 2021 AT 03.00 P.M IN ONLINE MODE

The Departmental Consultative Committee Meeting was held on 05.08.2021 at 03.00 p.m. in On-line mode (MS-Teams Platform) to discuss the following agenda:

- Approval of NPTEL Courses/Professional Elective Course for enrollment by B.Tech Ceramic Technology VI semester students in lieu of the Industrial training (2 credit course) to be done during May-June 2021.
- Approval of Self-study project by M.Tech Ceramic Technology II semester students in lieu of the Industrial training (1 credit course) to be done during May-June 2021.

The following members of the Departmental Consultative Committee were present:

- I. Head of the Department
  - 1. Dr.K.Kalaichelvan, Professor & Head, Dept. of Ceramic Tech. Convener
- II. Chairperson of the Faculty
  - 2. Dr. S.Subramaniam, Professor, Dept. of Textile Technology Member
- III. Faculty Members from the Department
  - 3. Dr.S.Manisha Vidyavathy, Asso. Prof., Dept. of Ceramic Tech. Member
  - 4. Dr.D.Thenmuhil, Asso. Prof., Dept. of Ceramic Tech. Member
- IV. Faculty Member nominated by Chairperson of the Faculty
  - 5. Dr.N.Balasubramanian, Professor, Dept. of Chemical Engg.
- V. Faculty Member nominated by Academic Courses
  - 6. Dr.G.Nandhini Devi, Asso. Prof., Dept. of Biotechnology Member

The convener of DCC warmly welcomed the members of the committee and briefed the agenda of the meeting.

The students of B.Tech Ceramic Technology – VI semester (R2015) have to undergo a **2 credits** course **CT7712** on **Industrial Training during summer** (May-June 2021) for duration of **4 weeks**. In view of the current pandemic situation, Centre for

Academic Courses have issued guidelines vide Notification No. Ref: Lr.No.2701/AU/CAC/Intern/2021 dated 28.07.2021, that the students can enroll for an additional Professional Elective or Online Course related to Professional Elective Courses (Not Open Elective Courses), and that the students shall undergo Online Course in SWAYAM or MOOC platform only and shall produce the Certificate / Mark sheet. The DCC is now conducted to discuss and ratify the same.

# Agenda 1: Approval of NPTEL Courses / Professional Elective Course for enrollment by B.Tech Ceramic Technology VI semester students in lieu of the CT7712 Industrial training (2 credit course) to be done during May-June 2021

Based on the guidelines issued by Centre for Academic Courses vide Notification No. Ref: Lr.No.2701/AU/CAC/Intern/2021 dated 28.07.2021, the UG students were permitted by the Department undergo either anyone of the following NPTEL courses or the Professional Elective (PE) Course offered by the Department in lieu of the Industrial Training. After due deliberations, the Department Consultative Committee approved and ratified the following NPTEL courses for B.Tech Ceramic Technology – VI semester students.

SI.No.	Course Code and Title	Offered By	Duration	Mode of Exam
1,	noc21-ce66	NPTEL	8 weeks	Assignment 25%
4	Hydration, Porosity & Strength of Cementitious Materials			End Exam 75%
2.	noc21-ch42	NPTEL	8 weeks	Assignment 25%
	Technologies For Clean And Renewable Energy Production		o£2	End Exam 75%
3.	noc21-me110	NPTEL	12 weeks	Assignment 25%
	Introduction To Composites	*		End Exam 75%
4.	GE7073	DEPARTMENT	45 Periods	Assessment 50%
	Fundamentals of Nano Science	OF CERAMIC TECHNOLOGY	×	End Exam 50%

The evaluation of NPTEL course is carried out by NPTEL through continuous assessments (25% weightage) and end examination (75% weightage). Hence, the committee recommends that the marks awarded for these courses by NPTEL may be taken for awarding grades without separate examination by the University. The evaluation of the PE course follows the University norms through two assessments

(50% weightage) and end examination (50% weightage). The grades may be fixed as per the Regulations / notifications of the University.

# Agenda 2: Approval of Self-study project by M.Tech Ceramic Technology II semester students in lieu of the CR 5312 Internship/Training (1 credit course) to be done during May-June 2021

Based on the guidelines issued by Centre for Academic Courses vide Notification No. Ref: Lr.No.2701/AU/CAC/Intern/2021 dated 28.07.2021, the PG students were permitted by the Department to carry out a self-study project in lieu of the Internship/ Training, under the guidance of faculty members as given below:

SI.No.	Name of the Student	Name of the Guide
1,	R.Rama	Dr.S.Manisha Vidyavathy
2.	C.Vinoth Kumar	Dr.D.Thenmuhil

The evaluation of the self-study project will be done by the Coordinator (duly appointed by the HoD) as per the Light-light.

The Convener thanked the members of DCC Committee for their valuable suggestions

Dr.G.Nandhini Devi
Member

Dr.N.Balasubramanian
Member

Dr.S.Manisha Vidyavathy
Member

Dr.S.Subramaniam
Member

Dr.K.Kalaichelvan
Convener

### **ANNEXURE**

# NPTEL COURSE REGISTRED IN LIEU OF INDUSTRIAL TRAINING (CT7712).

SI.No.	ROLL NO	NAME	NPTEL COURSE REGISTERED
1	2018301001	Adhira A S	Technologies for clean and renewable energy
2	2018301002	Anto Sneha Zarak A	Hydration, porosity & strength of cementious materials
3	2018301003	Anto Winslet C R	Hydration, porosity & strength of cementious materials
4	2018301004	Aravind Kumar A	Introduction to Composites
5	2018301005	Arunkumar K	Introduction to Composites
6	2018301006	Boomadevi Y	Hydration, porosity & strength of cementious materials
7	2018301007	Chaithra Babu	Technologies for clean and renewable energy
8	2018301008	Deepika A	Technologies for clean and renewable energy
9	2018301009	Deepika A	Technologies for clean and renewable energy
10	2018301010	Dhiwahar k	Introduction to Composites
11	2018301011	Divya D	Technologies for clean and renewable energy
12	2018301013	Gajalakshmi B	Introduction to Composites
13	2018301015	Gnanajothi A P	Technologies for clean and renewable energy
14	2018301016	Gokul M	Technologies for clean and renewable energy
15	2018301018	Gowtham M	Technologies for clean and renewable energy
16	2018301019	Jayashree Nair S P	Technologies for clean and renewable energy
17	2018301021	Joy Princy J	Hydration, porosity & strength of cementious materials
18	2018301022	Karthiga Kalyani M	Hydration, porosity & strength of cementious materials
19	2018301023	Kathiravan M	Hydration, porosity & strength of cementious materials
20	2018301024	Kaviyarasu S	Technologies for clean and renewable energy
21	2018301025	Kishore K	Technologies for clean and renewable energy
22	2018301027	Lijin L L	Hydration, porosity & strength of cementious materials
23	2018301028	Manoj Kumar Y	Technologies for clean and renewable energy
24	2018301029	Manokarthikeyan R	Hydration, porosity & strength of cementious materials
25	2018301030	Mathiyarasan M	Technologies for clean and renewable energy
26	2018301031	Momin R S	Technologies for clean and renewable energy
27 .	2018301032	Muthulakshmi T	Technologies for clean and renewable energy
28	2018301033	Narmatha V	Technologies for clean and renewable energy
29	2018301035	Naveen Prasanth V	Technologies for clean and renewable energy
30	2018301036	Needhichozhan M	Technologies for clean and renewable energy
31	2018301037	Preethi A	Technologies for clean and renewable energy
32	2018301038	Raghavendhar R	Technologies for clean and renewable energy
33	2018301040	Ramprasath K C	Technologies for clean and renewable energy
34	2018301042	Rupees Varman K	Hydration, porosity & strength of cementious materials
35	2018301043		Technologies for clean and renewable energy
36	2018301044	Sivaraja R	Hydration, porosity & strength of cementious materials
37	2018301045	Sreedharshni I	Technologies for clean and renewable energy
38	2018301047	Sujitha S	Hydration, porosity & strength of cementious materials
39	2018301049	Thilagavathy A	Hydration, porosity & strength of cementious materials
40	2018301050	Udhayanithi R	Hydration, porosity & strength of cementious materials
41	2018301051	Vallarasu v	Hydration, porosity & strength of cementious materials
42	2018301052	Yokeshwaran P	Technologies for clean and renewable energy
43	2018301054	Alwin A	Technologies for clean and renewable energy
44	2018301055	Jayaprakash P	Technologies for clean and renewable energy

PROFESSOR AND HEAD
Department of Ceramic Technology
Alagappa College of Technology,
Anna University, Chennai - 600 025.

# DEPARTMENT OF CERAMIC TECHNOLOGY ALAGAPPA COLLEGE OF TECHNOLOGY ANNA UNIVERSITY :: CHENNAI - 600 025

# MINUTES OF THE DEPARTMENTAL CONSULTATIVE COMMITTEE (DCC) MEETING HELD ON 24<sup>TH</sup> JANUARY 2022 AT 02.30PM IN ONLINE MODE

The Departmental Consultative Committee Meeting was held on 24th January 2022 at 02.30pm in Online Mode (MS Teams Platform) to discuss the following agenda

- 1. Approval of the Grades obtained by the students NPTEL Course
- 2. Approval of Open Electives to be offered in R2019
- 3. Approval of Value-Added Course during Summer Vacation 2022

The following members of the Departmental Consultative Committee were present:

- Head of the Department
  - 1. Dr K Kalaichelvan, Professor & Head, Dept of Ceramic Tech
- Convenor

- II. Chairperson of the Faculty
  - 2. Dr S Subramaniam, Professor, Dept of Textile Technology
- Member

- III. Faculty Members from the Department
  - 3. Dr S Manisha Vidyavathy, Associate Professor, Dept of Ceramic Tech-Member
  - 4. Dr D Thenmuhil, Associate Professor, Ceramic Tech
- Member
- IV. Faculty Member nominated by Chairperson of the Faculty
  - 5. Dr M Sukumar, Director, Centre for Food Technology
- Member

- V. Faculty Member nominated by Academic Courses
  - 6. Dr P Hariharan, Director, Centre for Constituent Colleges
- Member

The Convenor of DCC warmly welcomed the Newly Constituted DCC Committee members and briefed the agenda of the meeting.

#### AGENDA 1

#### APPROVAL OF THE GRADES OBTAINED BY THE STUDENTS IN THE NPTEL COURSE

As a part of the Undergraduate Curriculum, the students of VII Semester have to undergo an Industrial Training for a period of four weeks during summer vacation. Due to the COVID pandemic, the students were not able to undergo the Industrial Training. Further, the DCC held on 05.08.2022 granted approval for 3 Online Courses offered by NPTEL and One Professional Elective course offered by the Department. The students were permitted to choose either an Online Course offered by NPTEL and produce the Certificate by attending

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the examination conducted by NPTEL or one Professional Elective Course offered by the Department.

Based on the approval, three students had enrolled for the approved NPTEL Courses, gained their certificate after attending their examinations and submitted to the Department for grade classification.

As per the notification issued by the Director, Centre for Academic Courses vide notification no 363/AU/CAC/SA- Online/2021 dated 06.02.2021, the absolute grading shall be followed to the students. Based on the guidelines, grades were finalized for the three students.

S.N O	ROLL NO	NAME OF THE STUDENT	COURSE STUDIED	INTERN AL MARKS (25)	EXTER NAL MARK S (75)	TOTAL MARKS OBTAIN ED	GRADE
1.	2018301004	Aravind Kumar A	Introduction to Composites	25	64.5	90	0
2.	2018301006	Boomadevi Y	Hydration, Porosity & Strength of Cementitiou s Materials	22.5	60.75	83	<b>A</b> +
3.	2018301038	Raghavendh ar R	Technologie s for Clean and Renewable Energy Production	24.58	37.5	62	В+

O = 88 - 100, A + = 76 - 87, A = 64 - 75, B + = 52 - 63, B = 40 - 51

#### **AGENDA 2**

# APPROVAL OF OPEN ELECTIVES TO BE OFFERED IN R2019

Open Electives offered by the Department must be suggested for the R2019. In this regard, two open electives were suggested by the Department

- 1. Ceramic Materials for Engineers
- 2. Processing of Ceramics

After deliberations, the DCC members approved the two open elective courses to be offered by the Department in R2019.

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#### CERAMICS MATERIALS FOR ENGINEERS

#### **COURSE OBJECTIVE**

The course is aimed to

- To understand the traditional ceramic materials, its characteristics and applications
- To understand about the structure and properties of glass and glass ceramics
- To understand the structure and properties of advanced ceramic materials
- To gain knowledge on the ceramic materials used for functional applications
- To understand the ceramic materials used for biological applications

#### UNIT I CLASSIC CERAMICS

9

Introduction – natural clay minerals, formation of clay minerals, structure and properties of important clay minerals – kaolinite, illite, montmorillonite – non clay raw materials – structure and properties of phase systems – silica,  $Al_2O_3$  –  $SiO_2$ , CaO -  $Al_2O_3$  –  $SiO_2$ ,  $K_2O$  -  $Al_2O_3$  –  $SiO_2$ .

#### UNIT II GLASS AND GLASS CERAMICS

9

Introduction – natural glass – physics of glass – viscosity – properties –types of ceramic glasses –heterogenous glass – yttrium aluminium glass – coloring glass – glass laser – precipitates in glass – crystallizing glass – defects in glass - glass as glaze and enamel - glass fibres.

#### UNIT III ADVANCED CERAMICS

9

Introduction - Synthesis, Structure, Properties and applications of oxides and oxide based materials - alumina, mullite, spinel, zirconia, titania; non oxides - carbides - boron carbide, silicon carbide, nitrides - boron nitride, silicon nitride, aluminium nitride, silicon nitride, SiAIONs

#### UNIT IV FUNCTIONAL CERAMICS

9

Introduction – Definition and Properties of Ferroic, Smart and Intelligent materials - Structure and Properties of dielectric materials- ferroelectric ceramics – barium titanate, PZT, ferroelectric relaxor ceramics, piezoelectric and pyroelectric ceramics – electro-optic ceramics – PLZT – superconducting ceramics

#### UNIT V BIOCERAMICS

9

Introduction – basic aspects of biomineralization – concept and definition of biocompatibility – interaction of implant materials and living tissues – bioceramic materials – bio inert ceramics – alumina, yttria stabilized zirconia, bioconductive ceramics – bioglasses, hydroxyapatite, calcium-titanium-zirconium phosphates, resorable calcium phosphate ceramics.

**TOTAL PERIODS: 45** 

#### **COURSE OUTCOMES**

After the completion of the course, the students will be able

CO1 To apply the traditional materials for various traditional ceramic applications

CO2 To have the ability to know about the concepts of glass and glass ceramics

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- CO3 To apply the concepts of advanced ceramic materials in various applications
- CO4 To be familiar with the underlying concepts of functional ceramic materials
- CO5 To have gained knowledge on the materials used for biological applications

#### **TEXT BOOKS**

- 1. Phillippe Boch, Jean-Claude Niepce, "Ceramic Materials Processes, Properties and Applications", Hermes Science Publications, 2001
- 2. Carter C Barry, Norton M Grant, "Ceramic Materials Science and Engineering", 2007

#### REFERENCE BOOKS

- 1. Bikramjit Basu and Kantesh Balani, "Advanced Structural Ceramics", Wiley Publications, 2011
- 2. Wolfram Holand and George Beall, "Glass Ceramic Technology", The American Ceramic Society, 2002

### PROCESSING OF CERAMICS

#### COURSE OBJECTIVES

On completion of the course the students are expected to

- Have a thorough knowledge on the preparation of ceramic powder by mechanical and chemical methods.
- Have studied the types & role of additives in various ceramic forming processes.
- Have a better understanding on the mechanisms of sintering and grain growth during , sintering.
- Have learnt the advanced processing and sintering.
- Have learnt about ceramic machining methods.

#### UNIT I POWDER PREPARATION

9

Powder preparation by mechanical methods – comminution, mechano-chemical synthesis. Powder synthesis by chemical methods – solid state reaction, liquid solutions, vapour phase reactions.

### UNIT II ADDITIVES

7

Types of additives in ceramic forming – solvents, dispersant, binder, plasticizer, other additives. Effect/role of additive in ceramic forming - density, fluidity, viscosity, deflocculation, pH, zeta potential, plasticity.

#### UNIT III FORMING METHODS

9

Wet forming – Plaster mould, slip casting, pressure casting, gel casting, tape casting, electrophoretic deposition. Plastic forming methods - injection molding. Dry forming - Uniaxial pressing –vibration compaction, isostatic pressing.

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### UNIT IV SINTERING

Definition, types of sintering – solid state sintering, liquid phase sintering; grain growth – different grain growth process and control of grain growth. Advanced sintering – pressure assisted sintering, reaction bonded sintering and microwave sintering.

## UNIT V MACHINING OF CERAMICS

11

Basic machining requirements of ceramics – Grinding – Ductile Mode – ELID Grinding, Zirconia, Aluminium nitride – LASER assisted grinding – Ultrasonic machining – Abrasive water jet machining – High energy beam machining – EB, IB. Surface finishing methods – Ultrasonic lapping, MRAF.

#### **COURSE OUTCOMES**

On completion of this Course, Students are expected to

- CO1 Evaluate suitable method for ceramic powder preparation
- CO2 Identify suitable Additives for Wet Processing
- CO3 Identify suitable Wet, dry forming methods
- CO4 Identify suitable temperature range, Sintering aid and other Physical Parameters for sintering process
- CO5 Identify suitable machining method for ceramic materials

### **TEXT BOOKS**

- 1. Mohamed N.Rahaman, Ceramic Processing, Taylor & Francis, 2007.
- 2. Loan D. Marinescu, Handbook of Advanced Ceramic Machining, CRC press, 2007.

#### REFERENCE BOOKS

- 1. Alan G.King, Ceramic Technology and Processing, Noyes Publication, USA, 2001.
- 2. James S. Reed, Principle of Ceramic Processing, John Willey and Sons, NY, 1988.
- 3. David W. Richerson, Modern Ceramic Engineering, 3<sup>rd</sup> Edn., Taylor & Francis, 2005.
- 4. Paul De Garmo E, Black J.J and Ronald A.Kohser, Materials and Processes in Manufacturing, 8th Edn, Prentice Hall India Pvt. Ltd., New Delhi, 1997.
- 5. Reed J.S, Introduction to the Priciples of Ceramic Processing, Willey, New York, 1988.
- 6. John G.P.Binner (Ed), Advanced Ceramics Processing and Technology, Noyes Publications, New Jersey, 1990.
- 7. Burtrand Lee and Sridhar Komarnei (Eds.), Chemical Processing of Ceramics, 2<sup>nd</sup> Edn., Taylor & Francis, 2005.
- 8. Loan D. Marinescu, Toshiro Doi, Eckart Uhlmann, Handbook of Ceramics Grinding and Polishing, Elsevier, 2014.

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### **AGENDA 3**

# APPROVAL OF VALUE ADDED COURSE TO BE OFFERED IN SUMMER

### **VACATION**

The Department submitted a proposal to conduct a value added course to the 3<sup>rd</sup> and 4<sup>th</sup> Year students of Ceramic Technology during Summer Vacation on Refractory Engineering. After deliberations, the DCC members approved the Value Added Course.

Name of the Course

: Refractory – Design and Installation

Duration

: 10 days

Credits

: 1 credit [ Theory + Laboratory]

Course Instructor

Mr K Prasad.

Manager - Engineering - Lining, Insulation & Refractories,

BHEL, Tiruchirappalli

Expertise

 5 years of experience in Planning, Site and Project Related Activities in Steel Plant Refractories

 10 years of experience in design engineering of power plant refractories and Insulation

15years of experience in refractories in Industries like Vizag Steel Plant, BHEL etc

Course Fees

: No Fees

## REFRACTORY - DESIGN AND INSTALLATION

#### MODULE 1

#### THERMAL CALCULATIONS

- Temperature, Heat, Heat amount, Heat capacity, Heat Flow, Heat Flow Density, Storage Heat
- Heat transfer via thermal conduction, convection, and radiation
- Heat conduction thermal conductivity co-efficient single layer wall, multi-layer wall, cylindrical wall –
- Heat transmission by conduction, convection, radiation
- Heat flux Definition, Peripheral conditions and Specification/ Determination factors,
   Stationary heat flux through level and multiwall, cylindrical, and multiwall.
- Wall design Heat insulation inside and outside
- Nonstationary calculation
- Static calculations of load bearing parts taking the temperature influence into consideration

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## **MODULE 2**

# HANDS ON TRAINING USING SIMUTHERM SOFTWARE

- Introduction to Simutherm
- Transient Heat Loss Simulation of kiln car
- Transient Heat Flow Simulation
- Steady State Heat Flow Simulation
- Multiwall Conduction in a furnace
- Fire Protection Simulation
- Simulation in Fire Concrete Drying
- Simulation of ventilated air spaces
- Pressure dependent calculation of static air gaps
- Impact of condensed water in insulation layers
- Heating up conditions with power limitation

#### **SCHEDULE**

S.NO	DAY	SESSION – I [1 hour]	SESSION – II [2 hours]
1.	DAY 1	Introduction to the concepts of furnace design and construction	Introduction to SIMUTHERM Software
2.	DAY 2	Temperature, Heat, Heat amount, Heat capacity, Heat Flow, Heat Flow Density, Storage Heat	<ul> <li>Transient Heat Loss</li> <li>Simulation of kiln car</li> <li>Transient Heat Flow</li> <li>Simulation</li> </ul>
3.	DAY 3	Heat transfer via thermal conduction, convection, and radiation	Steady State Heat Flow Simulation
4.	DAY 4	Heat conduction – thermal conductivity co- efficient – single layer wall, multi-layer wall, cylindrical wall	Multiwall Conduction in a furnace
5.	DAY 5	Heat transmission by conduction, convection, radiation	Fire Protection Simulation
6.	DAY 6	Heat flux – Definition, Peripheral conditions, and Specification/ Determination factors,	Simulation in Fire Concrete Drying
7.	DAY 7	Stationary heat flux through level and multiwall, cylindrical, and multiwall.	Simulation of ventilated air spaces

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8.	DAY 8	Wall design - Heat insulation – inside and outside -	Pressure dependent calculation of static air gaps
9.	DAY 9	Nonstationary calculation	Impact of condensed water in insulation layers
10.	DAY 10	Static calculations of load bearing parts taking the temperature influence into consideration	Heating up conditions with power limitation
11.	DAY 11	Assessment	

The Convenor thanked the members of the DCC Committee for their valuable suggestions

Dr M Sukumar Member

2411/22

Dr P Hariharan Member

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Dr D Thenmuhil
Member

2411/22

Dr S Manisha Vidyavathy

Member

24/1/22

Dr S Subramaniam Member

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Dr K Kalaichelvan

Convene

24/01/2022

This certificate is computer generated and can be verified by scanning the QR code given below. This will display the certificate from the NPTEL repository, https://nptel.ac.in/noc/

Roll No: NPTEL21CH42S14450128

TO RAGHAVENDHAR R NOSO, 3RD STREET INDIRA NAGAR, OTTERI VELLORE **TAMIL NADU - 632002** PH. NO:9965829426



Score	Type of Certificate		
>=90	Elite+Gold		
75-89	Elite+Silver		
>=60	Elite		
40-59	Successfully Completed		
<40	No Certificate		

No. of credits recommended by NPTEL:2

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



# NPTEL Online Certification

(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to

# RAGHAVENDHAR R

for successfully completing the course

# Technologies for Clean and Renewable Energy Production

with a consolidated score of

62

Online Assignments | 24.58/25 | Proctored Exam

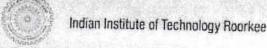
37.5/75

Total number of candidates certified in this course: 312

Prof. V. C. Srivastava Coordinator, Continuing Education Centre IIT Boorkee

Jul-Sep 2021 (8 week course) riti Mahashwani

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





This certificate is computer generated and can be verified by scanning the QR code given below. This will display the certificate from the NPTEL repository, https://nptel.ac.in/noc/

Roll No: NPTEL21ME110S43351479

TO ARAVIND KUMAR A 36,RAGAVAN STREET 53B,THULASINGAM STREET CHENNAI TAMIL NADU - 600011 PH. NO :9566236307



Score	Type of Certificate		
>=90	Elite+Gold		
75-89	Elite+Silver		
>=60	Elite		
40-59	Successfully Completed		
<40	No Certificate		

No. of credits recommended by NPTEL:3

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



# Elite

# NPTEL Online Certification

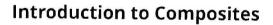
(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to

## ARAVIND KUMAR A

for successfully completing the course



with a consolidated score of

90

%

Online Assignments

25/25

Proctored Exam

64.5/75

Total number of candidates certified in this course: 345

Prof. Rajesh M.Hegde Chairman, Centre for Continuing Education IIT Kanpur

Jul-Oct 2021 (12 week course) Prof. Satyaki Roy NPTEL Coordinator

IIT Kanpur



Indian Institute of Technology Kanpur



This certificate is computer generated and can be verified by scanning the QR code given below. This will display the certificate from the NPTEL repository, https://nptel.ac.in/noc/

Roll No: NPTEL21CE66513300359

31/148, NADAR EAST ST, THIRUPPUVANAM PUDUR 31/14B NADAR EAST ST, THIRUPPUVANAM PUDUR SIVAGANGAI **TAMILNADU - 630611** 

PH. NO:6384293429



	Score	Type of Certificate
-	>=90	Elite+Gold
-	75-89	Elite+Silver
	>=60	Elite
	40-59	Successfully Completed
1	<40	No Certificate

No. of credits recommended by NPTEL:2

An additional 1 credit may be awarded if the University deems it fit, based on the actual student effort involved.



(Funded by the Ministry of HRD, Govt. of India)



This certificate is awarded to

### **BOOMADEVIY**

for successfully completing the course



# **Hydration, Porosity & Strength of Cementitious Materials**

with a consolidated score of

Online Assignments

22.5/25 | Proctored Exam

60.75/75

Total number of candidates certified in this course: 112

Prof. Rajesh M.Hegde

Chairman, Centre for Continuing Education **UT Kanpur** 

Jul-Sep 2021 (8 week course) Prof. Satyaki Roy NPTEL Coordinator



Indian Institute of Technology Kanpur



# ALAGAPPA COLLEGE OF TECHNOLOGY

ANNA UNIVERSITY :: CHENNAI - 600 025

# MINUTES OF THE DEPARTMENTAL CONSULTATIVE COMMITTEE (DCC) MEETING HELD ON 7<sup>TH</sup> FEBRUARY 2022 AT 02.30PM IN ONLINE MODE

The Departmental Consultative Committee Meeting was held on 7<sup>th</sup> February 2022 at 02.30pm in Online Mode (MS Teams Platform) to discuss the following agenda

- 1. Approval of Eligible Qualification for Admission to M.Tech Ceramic Technology Programme
- 2. Approval of Lateral Entry to B.Tech Ceramic Technology Programme

The following members of the Departmental Consultative Committee were present:

- Head of the Department
  - 1. Dr K Kalaichelvan, Professor & Head, Dept of Ceramic Tech

- Convenor

- II. Chairperson of the Faculty
  - 2. Dr S Subramaniam, Professor, Dept of Textile Technology

- Member

- III. Faculty Members from the Department
  - 3. Dr S Manisha Vidyavathy, Associate Professor, Dept of Ceramic Tech- Member
  - 4. Dr D Thenmuhil, Associate Professor, Ceramic Tech

- Member

- IV. Faculty Member nominated by Chairperson of the Faculty
  - 5. Dr M Sukumar, Director, Centre for Food Technology

- Member

- - 6. Dr P Hariharan, Director, Centre for Constituent Colleges

Member

The Convenor of DCC warmly welcomed the DCC Committee members and briefed the agenda of the meeting.

## **AGENDA 1**

# APPROVAL OF ELIGIBLE QUALIFICATION FOR ADMISSION TO M.TECH CERAMIC TECHNOLOGY PROGRAMME

The existing eligible qualification for admission to M.Tech Ceramic Technology Programme was looked into and it was decided to remove the following two eligibile qualification:

- M.Sc Chemistry
- 2. M.Sc Applied Chemistry

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5- Felaichting 7/2/2022 The Departmental Consultative Committee approved the following eligible qualification for admission to M.Tech Ceramic Technology Programme after detailed deliberation.

S.NO	ELIGIBLE QUALIFICATION			
	B.E./B.Tech			
1	Ceramic Engineering / Technology			
2.	Ceramic and Cement Technology			
3.	Metallurgical and Materials Engineering			
4.	Metallurgical Engineering			
5.	Metallurgical Engineering and Materials Science			
6.	Materials Engineering			
7.	Materials Science and Engineering			
8.	Chemical Engineering			
9.	Chemical and Electrochemical Engineering			
10.	Nanotechnology*			
11.	Nanoscience and Technology			
12.	Petroleum Engineering / Technology			
13.	Petrochemical Engineering / Technology			
14.	Petroleum Refining and Petrochemical Engineering			
15.	Biotechnology			
16.	Mechanical Engineering			
17.	Manufacturing Engineering			
18.	Production Engineering			
	<u>M.Sc</u>			
19.	Physics			
20.	Applied Physics			
21.	Materials Science			
22.	Nanotechnology <sup>*</sup>			
3.	Nanoscience and Technology <sup>*</sup>			
4.	Nanosciences and Nanotechnology <sup>*</sup>			

<sup>\*</sup> Courses to be included in the existing Education Qualification list for admission to M.Tech Ceramic Technology Programme from June 2022 session onwards

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## AGENDA 2

# APPROVAL OF LATERAL ENTRY TO B.TECH CERAMIC TECHNOLOGY PROGRAMM

The Departmental Consultative Committee agreed to recommend the approval of lateral entry of Diploma students to B.Tech Ceramic Technology Programme.

The Convenor thanked the members of the DCC Committee for their valuable suggestions.

Dr M Sukumar Member

Dr P Hariharan Member

Dr D Thenmuhil Member

Dr S Manisha Vidyavathy

Dr S Subramaniam Member

Dr K Kalaichelvan

Convenor

# DEPARTMENT OF CERAMIC TECHNOLOGY ALAGAPPA COLLEGE OF TECHNOLOGY

ANNA UNIVERSITY :: CHENNAI - 600 025

# MINUTES OF THE DEPARTMENTAL CONSULTATIVE COMMITTEE (DCC) MEETING HELD ON 21<sup>ST</sup> APRIL 2022 AT 10.00AM IN ONLINE MODE

The Departmental Consultative Committee Meeting was held on 21st April 2022 at 10.00am in Online Mode (MS Teams Platform) to discuss the following agenda

1. Reduction of Student Intake for PG Programme

The following members of the Departmental Consultative Committee were present:

- I. Head of the Department
  - 1. Dr K Kalaichelvan, Professor & Head, Dept of Ceramic Tech

- Convenor

- II. Chairperson of the Faculty
  - 2. Dr S Subramanian, Professor, Dept of Textile Technology

- Member

- III. Faculty Members from the Department
  - 3. Dr S Manisha Vidyavathy, Associate Professor, Dept of Ceramic Tech- Member
  - 4. Dr D Thenmuhil, Associate Professor, Ceramic Tech

- Member

- IV. Faculty Member nominated by Chairperson of the Faculty
  - 5. Dr M Sukumar, Director, Centre for Food Technology

- Member

- V. Faculty Member nominated by Academic Courses
  - 6. Dr P Hariharan, Director, Centre for Constituent Colleges

- Member

The Convenor of DCC warmly welcomed the DCC Committee members and briefed the agenda of the meeting.

## **AGENDA 1**

# REDUCTION IN THE STUDENT INTAKE OF PG PROGRAMME

The admission to the M.Tech Ceramic Technology had been below five for the past three years. In this connection, it was suggested to reduce the intake of the PG students. In this connection, the members recommended to reduce the intake from 25 to 12 from the academic year 2022-23. Approval from the competent authority shall be obtained for the same.

Name of the Programme	Existing In take	Revised In take
M.Tech Ceramic Technology	25	12

### AGENDA 2

# RECRUITMENT OF TEACHING AND NON-TEACHING STAFF

Three Teaching Fellows and One Professional Assistant-I working in the Department have resigned their job due to various reasons. Further, the extension of the Departmenthas also created many new laboratories with equipment to be handled with utmost care has created a shortage of Non-Teaching Staff to handle the equipment in the laboratories. Additional staff requirement is required for the smooth conduct of the academic activities.

S.No	Position	Existing	Additional Requirement
	TEACHING STAFF		
1.	Teaching Fellow (as per SFR)	9	1
	NON-TEACHING STAFF		
2.	Clerical Assistant	0	1
3.	Professional Assistant I	2	1
4.	Professional Assistant III	1	2
5.	Peon	0	1

The Convenor thanked the members of the DCC Committee for their valuable suggestions

Dr M Sukumar Member Dr P Harihara Member

Dr D Thenmuhil

Dr S Manisha Vidyavathy

Member

Dr S Subramanian Member

Dr K Kalaichelvan 21/04/2

Member