



DIRECTORATE OF RESEARCH AND DEVELOPMENT
Jawaharlal Nehru Technological University Hyderabad

Kukatpally, HYDERABAD – 500 085, Telangana State

Dr. M. Anji Reddy

M.Tech., Ph.D.

Professor of Environmental Science & Technology
DIRECTOR

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rndcell@jntuh.ac.in

Lr. No. H/JNTUH/DRD/Ph.D./Re-submission/T/42/2019, Dt. 28-08-2019

To

Dr. M. Venkata Ramana (Supervisor),

Principal,
SR&BGNR Arts and Science Govt. Degree College,
Khammam, Telangana.

Sir/ Madam,

Sub: JNTUH - DRD – **Ms. Kondapati Ashalatha**, (Physics) – **H. T. No. 1103PH1715** – Thesis – **Revision & Resubmission** before scheduling for Viva-Voce Examination – Reg.

Ref: D.O. Lr. No. P7/Ph.D./19121/04-37/KA/Physics/2019, Dt. 17-08-2019.

With ref. to the Ph.D. (Physics) Thesis submitted, the University through its letter ref. cited above has communicated the recommendations and comments of **one** of the examiners who has valued the thesis on “**Bioactive Studies on some Disordered Materials**” (Copy enclosed).

The Research Scholar is directed to answer the queries, revise the thesis as per the specific comments and recommendations made by the examiner and resubmit **two** copies of the thesis after incorporating the corrections and remarks along with the endorsement of the Research Supervisors for taking further necessary action.

Yours faithfully,

DIRECTOR

Copy to: **Dr. M. Chandra Shekar (Co-supervisor)**, Retd. Professor of Physics & Former Rector, JNTUH, Kukatpally, Hyderabad-85, T.S.
Ms. Kondapati Ashalatha, Research Scholar, Physics, JNTUH, Kukatpally, Hyderabad.

The thesis entitled "Bioactive studies on some Disordered materials is a technologically important area for various medical applications". The author has given elaborate review of the literature of her proposed work. However, the author has not highlighted the objectives of his work. The thesis has been divided into four chapters.

Chapter1 gives introduction to Biomaterials, classification of Biomaterials, Glassy ceramics. It also includes the topics like Bone bonding mechanism of Bioactive glass, glass structure. It also provides a comprehensive review of literature on Bio materials especially on bioactive glasses.

Chapter2 deals with materials and methods which covers the glass composition and preparation of simulated body fluid, in vitro bioactivity study. The experimental techniques like XRD, SEM, EDX, PH measurements are discussed.

Chapter3 presents the results of the investigation on bioactivity of disordered Borosilicaphosphate, Borosilicate and phosphate glasses. The author has prepared and characterizes the above mentioned materials to explore the in vitro bioactivity nature. The glasses were synthesized by melt quenching technique. Mostly the glasses were found to be amorphous but some of the glasses were found to be crystalline. The author has not indexed the crystalline glasses. To assess the bioactive nature of the glass samples in vitro studies were carried out by immersing the samples in simulated body fluid for seven days. The PH measurements indicates a variation in PH value for all samples. This concludes that the glass samples have solubility in simulated body fluid and were able to bond with living tissues in vivo. The weight loss measurements for all samples were carried out and the samples show weight loss. Greater weight loss percentage due to immersion in simulated body fluid was observed for phosphate glasses. The presence of peaks in the XRD analysis clearly indicated the presence of crystalline phase of hydroxyl apatite layer on the surface of glasses after immersion in simulated body fluid. The SEM images revealed the formation of hydroxyapatite on the surface of all the glasses.

Chapter4 reports the summary and conclusions drawn from the characterization results on Borosilica phosphate, Boro silicate, Boro phosphate glasses doped with Li_2O , LiCl , LiF , LiBr . It has also included the scope for future work.

The author has selected a very good topic for research but the thesis is not presented systematically and there are grammatical mistakes observed in the presentation of the thesis. The objectives of the thesis are not clearly specified. Some of the XRD found to be crystalline and were not indexed properly. All the above shortfalls can be rectified before the viva-voce examination.

I also strongly advise her to publish the results in peer reviewed journals.

II



RAYALASEEMA UNIVERSITY

(A State University Established by Govt. of A.P)

KURNOOL - 518 007 (A.P.) INDIA.

No. RU/Exams/Ph.D./PHY/0226/2018

Date:28.05.2018

NOTIFICATION

It is hereby notified that, on the recommendations of the Viva-Voce Committee duly constituted by the University, on the thesis submitted by **Mr. MADUNURI CHANDRA SEKHAR** Department of **PHYSICS** for the award of Ph.D. Degree, it is decided and declared that the candidate is eligible for the award of Degree of **DOCTOR OF PHILOSOPHY (Ph.D.)** in **PHYSICS** of this University. The Ph.D. Degree is awarded with effect from **21.05.2018**.

| Name of the Candidate | Subject & Regd. No. | Name and Address of the Research Supervisor | Date of Viva-Voce |
|-------------------------|----------------------------|---|-------------------|
| MADUNURI CHANDRA SEKHAR | PHYSICS (PP. PHY. 0024) | Dr. M. Venkata Ramana , Lecturer, Dept. of Physics, SR & BGNR Govt College, Khammam | 21.05.2018 |

Title of the thesis: "SYNTHESIS OF ZNO NANOSTRUCTURES & THEIR UTILITY IN CORROSION RESISTANCE, ROBUST NANOGENERATOR"

(BY ORDER)

Director, Research Studies
DIRECTOR
Research Studies
RAYALASEEMA UNIVERSITY
KURNOOL - 518 002 A.P.

Copy to:

- ✓ The candidate through proper Channel
- The Research Supervisor: Dr. M. Venkata Ramana , Lecturer, Dept. of Physics, SR & BGNR Govt College, Khammam
- The Principal, Rayalaseema University College, Kurnool.
- The Controller of Examinations, Rayalaseema University, Kurnool.
- PA to Vice Chancellor / Registrar, Rayalaseema University, Kurnool.
- The Registrars of Indian Universities.
- Secretary, University Grant Commission, Bahadurshah Zafar Marg, NewDelhi (Along with a soft copy of the Thesis).
- The Secretary, Association of Indian Universities, Rouse Avenue, New Delhi.
- All the Editors of all Dailies with a request to publish the contents of Notification as NEWS ITEM.



**APPENDIX-I
Registration Notice**

KLU/AR/2013-14/reg/ 5185

Date: 6th July 2013

From,
Dean (R&D)
K L University, Green Fields, Vaddeswaram, Guntur District PIN 522502

To,
P. Sumeeta
H. No - 4-6-6, G.R. Basti
Kothagudem - 507101

Dear P. Sumeeta,

Subject:- Ph. D Registration

We are in receipt of the following documents that you have submitted in connection with registration into a PhD program in the Department of "Physics".

1. A demand draft number 289388 drawn on 19-07-2013,
Andhra State Bank of India dated 19-07-2013 drawn in favor of Registrar K L University.

2. Personal declaration (**Appendix-AG**)

3. NOC

4. —

We are pleased to inform you that, you have been selected to be a PART-TIME/FULL- research scholar in the department of "Physics".

Name of the Supervisor: Dr. M. V. Ramana

Name of the Co-Supervisor: Dr. Ch. Venkata Reddy

You are requested to contact your supervisor for finalization of research Plan, and shall submit the same within two months time through your supervisor.

Best Wishes,

Dean (R&D)

Ch. Hanumanth Rao
20/7/13
Dr. Ch. Hanumanth Rao
Associate Dean (Research)
K L University
VADDESWARAM
Tadipatri Mandal, Guntur District

Web : www.jntuh.ac.in
Email : dephd@jntuh.ac.in



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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
(Established by JNTU Act No. 30 of 2008)

Kukatpally, Hyderabad - 500 085, Telangana (India)

Dr. V KAMAKSHI PRASAD
M.Tech., Ph.D. (IIT - Madras), FIE., MCSJ
Professor of Computer Science and Engineering &
DIRECTOR OF EVALUATION

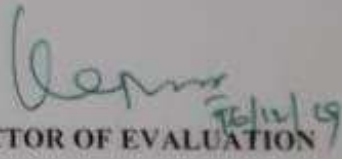
Ref: P7/Ph.D./19121/04-37/KA/Physics/2019
Dt: 16.12.2019

NOTIFICATION

Sub: Award of Ph.D. Degree in Physics to Ms. Kondaparthi Ashalatha (HT.No.1103PH1715).

The thesis entitled "Bioactive Studies on Some Disordered Materials" submitted by Ms. Kondaparthi Ashalatha has been accepted by the University on the recommendations of the panel of examiners. Ms. Kondaparthi Ashalatha is provisionally declared and qualified for the award of Doctor of Philosophy in the faculty of Physics.

//By order//


DIRECTOR OF EVALUATION

1. Ms. Kondaparthi Ashalatha- through the Director, DRD, JNTUH, Kukatpally, Hyderabad.
2. Dr. M Venkata Ramana, Principal, S.R & B.G.N.R. Arts & Science Govt. Degree College, Khammam - 507 002, Telangana State. **[Supervisor]**
3. Dr. M Chandra Shekar, Retd. Professor from JNTUH, H.No. 11-10-92/A/2, SBI Colony, Road No. 5, Kothapet, Hyderabad - 500 035, Telangana State. **[Co-Supervisor]**
4. Dr. M.V. Ramana Reddy, Professor, Department of Physics, Osmania University, Hyderabad - 500 007, Telangana State. **[External Examiner]**
5. PA to Vice-Chancellor, Administrative Building, JNTUH, Kukatpally, Hyderabad.
6. PA to Registrar, Administrative Building, JNTUH, Kukatpally, Hyderabad.
7. The Director, Directorate of R&D, JNTUH, Kukatpally, Hyderabad.
8. The Director, Academic and Planning, JNTUH, Kukatpally, Hyderabad
9. The Controller of Examinations, JNTUH, Kukatpally, Hyderabad.
10. The Director, Association of Indian Universities, Rouse Avenue, New Delhi.
11. The Public Relations Officer, Administrative Building, JNTUH, Kukatpally, Hyderabad.

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
KUKATPALLY - HYDERABAD 500 045

ADMISSION LETTER

DR. A VINAYA BABU
DIRECTOR, ADMISSIONS

Le.No.DA/R1/Ph.D/M.Phil/MS/Adms(X)/2011
Dt. 22.08.2011

SUB : JNTUH - Admissions to External Research Programmes - 2011

1. You are provisionally selected for admission into Ph.D. programme in PHYSICS faculty subject to availability of vacancy at the guide and/or co-guide.
2. You are requested to report to the Director, Research & Development Cell, JNTUH, Kukatpally, Hyd.-85 on or before 01.09.2011 and submit the following:
 - (i) P.G. Degree Certificate in Original (Provisional Certificate is not admissible)
 - (ii) Transfer Certificate in original
 - (iii) Fees:
A Demand Draft drawn on any nationalized bank for Rs.20,000/- (Rs.20,000/- one year fee + Rs.500/- caution deposit + Rs.200/- admission fee) in favour of The Registrar, JNTUH, Hyderabad payable at Hyderabad.
Regular University employees have to pay of Rs.200/- towards the admission fee.
 - (iv) Joining Report of the candidate, countersigned by the Research Supervisor(s) indicating the place where the Research work will be carried out.
 - (v) No Objection Certificate from the Head of the Organisation.
 - (vi) Latest Four passport size photographs.

3. Details of the Candidates:

(i) Name & Address: K ASHA LATHA
HNO.4-2-78
SRINAGAR COLONY
KHANAPURAM HAVELI
KHAMMAM

Supervisor(s) Name
Designation and Address
DR M VENKATRAMANA
LECTURER IN PHYSICS
SR BSNR GOVT COLLEGE
KHAMMAM

Co-Supervisor(s) Name
Designation and Address
DR M CHANDRA SHEKAR
PROFESSOR OF PHYSICS & RECTOR
JNTUH UNIVERSITY
KUKATPALLY
HYDERABAD-85

Topic of Research.

MOLECULAR DYNAMICS SIMULATION OF SOME DISORDERED MATERIALS

4. From second year onwards for each year you will have to pay an amount of Rs.20,000/- (Rupees twenty thousands only) towards yearly fee before July 31 and obtain receipt.

To
140024
K ASHA LATHA


DIRECTOR, ADMISSIONS

Copy to:

- (1) The Director, R&D Cell, JNT University, Kukatpally, Hyderabad-85
- (2) Supervisor are requested to check the list of candidates (given in JNTUH website) admitted under them till last year and then accept newly admitted candidate only if the no. of candidates under them are less than eight.
Submit your list of eight candidates along with acceptance letter to Director R&D Section, JNTUH. After verifying the no. of candidates the admission of new candidate will be approved.
- (3) Co-Supervisor with a request to accept only if the no. of scholars are less than eight.

Note: The candidate should collect copy of guidelines & academic regulations from the Director, R&D Cell, JNT University, Hyderabad.

Web : www.jntuh.ac.in
Email : dephd@jntuh.ac.in



Phone: Off: +91-40-23156113
Fax: +91-40-23158668

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Professor of Computer Science and Engineering &
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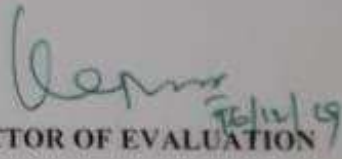
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3. Dr. M Chandra Shekar, Retd. Professor from JNTUH, H.No. 11-10-92/A/2, SBI Colony, Road No. 5, Kothapet, Hyderabad - 500 035, Telangana State. **[Co-Supervisor]**
4. Dr. M.V. Ramana Reddy, Professor, Department of Physics, Osmania University, Hyderabad - 500 007, Telangana State. **[External Examiner]**
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7. The Director, Directorate of R&D, JNTUH, Kukatpally, Hyderabad.
8. The Director, Academic and Planning, JNTUH, Kukatpally, Hyderabad
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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

HYDERABAD - 500 085, TELANGANA STATE, INDIA

TS 1437800



H.T No. : 1103PH1715

Ms. Kondaparthi Ashalatha

D/o. Sreenivasa Rao

having fulfilled the academic requirements in *December - 2019*
has this day been admitted by the Executive Council to the Degree of

Doctor of Philosophy
Physics

Topic: "Bioactive Studies on Some Disordered Materials".

Given under the Seal of the University

Date: 16-10-2020



[Signature]

DIRECTOR OF EVALUATION

[Signature]

REGISTRAR

[Signature]

VICE CHANCELLOR



49114161607

PC No
319001423