

Dated: 27th August, 2019

To,
The Vice Chancellor
Shobhit Institute of Engineering and Technology
(Deemed to be University), Meerut, India

Subject: Request regarding creation the RUDRAKSHA lab at Shobhit Institute of Engineering & Technology (Deemed to-be-University) Meerut, India.

Dear Sir,

The field of nanotechnology has been looking for strategies to eliminate the ever lingering therapeutic challenges. The biosynthesis of nanoparticles has shown promising results especially in nanomedicine and Rudraksha (*Elaeocarpus Ganitrus* Roxb.), has revealed the presence of nanoparticles for different therapeutic practices. The reason for using the Rudraksha over other plant materials is its property of being non-degradable. It was observed in the research the same bead is capable of giving innumerable extracts, can withstand being boiled repeatedly.

Rudraksha have enormous medicinal and therapeutic properties and the flavonoids present in Rudraksha, gives it the antibacterial and antimicrobial effectiveness. The inherent ability of Rudraksha to withstand multiple extractions along-with it's the innate medicinal properties makes Rudraksha an exploitable resource for instant, never-ending. The application of the extracts of the sacred bead in the field of nanotechnology as well as antimicrobial sciences has substantiated the enormous potential as a nanomedicine. In between all the controversies and concerns regarding the safe usage, Rudraksha have potential application with reduced side effect.

Based on the above points spirituality, there is a limited number of research have been carried out. Therefore, we wish to execute the future research in the area of healthcare and Nanoscience & nanotechnology, we wish to create a Rudraksha centre for research and development point of view. This laboratory will be helpful for the undergraduate and postgraduate student to trend them in the area of plan cell culture. In addition, this lab will also expertise to PhD student in this particular field.

Therefore, it with humble request, please approve the above request to formulate the lab accordingly.

Thanking You.

Yours sincerely,

Sandeep
27/08/2019
Dr. Sandeep Kumar
School of Biological Engg. & Life Sciences
Department of Biomedical Engineering
Shobhit Institute of Engineering and Technology
(Deemed to be University), Meerut

Copy to:

PS to Hon'ble Chancellor & VC – for kind information to Hon'ble Chancellor & Vice Chancellor, please



*Approved on
on last part
27.8.19
VC*

CENTRE FOR RESEARCH ON RUDRAKSHA (CeRR)

About Centre:

Centre for Research on Rudraksha (CeRR) was established in 2018 under School of Biological Engineering and Life Sciences, Shobhit Institute of Engineering and Technology (Deemed to be University) with an aim to promote scientific basis of Rudraksha for sustainable and healthy society. Rudraksha is a “wonder bead” with eminent medicinal and holistic properties. According to ancient literature (Vedas and Purans) Rudraksh means tears of ‘Lord Shiva’ (‘Rudra’ means ‘Shiva’ and ‘Aksh’ means ‘tear’) and botanically it’s a seed that belongs to tree of *Elaeocarpus* spp. CeRR has taken up the challenge to generate scientific evidences about Rudraksha through its infrastructural and intellectual capital as acclaimed in traditional system of medicine. The Centre strives to leverage Engineering and Technology principles to produce cutting edge outcomes from Rudraksha plant material for the development of sustainable society.

Mission and Vision:

The foundation of Centre for Research on Rudraksha (CeRR) has been led in accord with the vision of Honorable Prime Minister of India, Shri Narendra Modi who always promotes the blending of traditional knowledge and modern research. Honorable Prime Minister expressed great faith on ancient wisdom and traditions time to time and calls for action for the transformation of ancient wisdom and practices as per the modern needs. Commitment towards the evidence-based promotion of traditional knowledge, practices, and products has also been desired and elaborated in National Education Policy, 2021. SIET is working tirelessly in the scientific validation and technological development of ancient wisdom and specifically focusing on Rudraksha best practices. The choice of Rudraksha as a major scientific domain at SIET has an interesting background. During the reading of one of the ancient sculptures it was



stated that Rudraksha is an outcome of tears of Lord Shiva. This has given a scientific implication to Honorable Chancellor Kunwar Shekhar Vijendra, Vice Chancellor Lt. Prof (Dr.) D. V. Rai, and Lt. Shri Mahamandelshwar Martandpuriji Maharaj that being a biological part of Lord Shiva it should possess the DNA content of Lord Shiva. Since then, under the supervision of Honorable Chancellor a team of eminent researchers, academicians, technocrats, educationists, and social workers are constantly working for CeRR with the mission to scientifically validate and standardize therapeutic and holistic actions of Rudraksha as defined in traditional system of medicine by using advanced technology. CeRR strives for the global awareness, advocacy and promotion of research and mass cultivation of Rudraksha and is envisaged to serve the community as a major Resource Centre for the development of innovative technologies and products using Rudraksha for the overall wellbeing and building of healthy society.

Thrust Research Areas of CeRR:

The current thrust areas of research include:

- Documentation of local traditional medical practices.
- Scientific validation of medicinal properties of Rudraksha and its formulations.
- Structural, compositional, and phytochemical characterization of Rudraksha
- Development of chemical and molecular markers of Rudraksha
- Tissue culture propagation of Rudraksha for mass production
- Mass cultivation of Rudraksha plant by adopting good agricultural practice
- Innovative product development from Rudraksha with biomaterials, therapeutic and nutraceutical values.
- Improvement of infrastructural facilities and strengthening human resources
- Development of sustainable solutions for rural population by transforming Rudraksha based technologies into employment generation skills.
- Creation of general awareness and promotion of scientific temperament about Rudraksha.



Human Resource Development at CeRR:

- CeRR offers Ph.D. & Post Doctoral research programs on its thrust areas.
- CeRR provides dissertation projects facilities to Undergraduate and Graduate students of different biological domains.
- CeRR offers short term training programs related to the thrust areas.
- CeRR offers skill based training programs for various technologies and product development conducted by the Centre.
- CeRR also provides participation in social activities for the promotion, advocacy, and awareness of Rudraksha.
- CeRR also supports in incubating innovative research ideas for the development of entrepreneurs under the given thrust areas.

CENTRE FOR RESEARCH ON RUDRAKSHA (CeRR) Executive Committee

Chairperson:

Dr. Sandeep Kumar

Professor, Department of Biotechnology

Sandeep
27/10/19

Co-Chairperson:

Dr. Manisha Rastogi

Associate Professor, Department of Biomedical Engineering

Manisha

Members:

1. Dr. Alpana Joshi

Coordinator, Department of Agriculture and Agri-informatics

Alpana Joshi

2. Dr. Jyoti Sharma

Professor, Department of Biotechnology

Jyoti Sharma

3. Dr. R.K. Jain

Professor, School of Applied Science

RK Jain

4. Dr. Mamta Bansal

Professor, Department of Computer Science Engineering

Mamta

Dr. Niraj Singh

5. Dr. Saurabh Tyagi

Assistant Professor, Department of Agriculture and Agri-informatics

Saurabh Tyagi

+ Ms. Shiva Channa, Dept of Biomedical Engg.

Approved
27.8.19

