

## NOTICE

### Selection of participants under UGC-STRIDE Program

Applications are invited for the selection of participants under UGC-STRIDE Program (Scheme for Tran-disciplinary Research for India's Developing Economy under the broad thrust area, Research Capacity Building in “**Bioprospecting natural products for human health and socio-economic development in Haryana**” sanctioned by UGC under Component-1 to Maharshi Dayanand University, Rohtak (Haryana). The details are as below:

Number of Participants	30 (Thirty Only)
Duration	As per UGC-STRIDE (One year 2021-22)
Essential Qualifications	Ph.D. Scholar and young faculty members in the field of Life Sciences/Pharmaceutical Sciences.
Desirable	The preference will be given to the candidates who are working in the field of natural products.
Support	The selected participants will be supported during their outstation training programs i.e. travel, stay, refreshments and meals etc. There is no provision of fellowship in this program.
How to apply	Interested candidates are requested to send their CV mentioning: Educational qualifications, experience, list of publications, research domain and output, present status of working and personal contact details with all supporting documents in the form of hard copy at following address. In addition soft copy of the application may be sent by email. The last date for the receipt of application is 20 <sup>th</sup> November 2021. Dr. Santosh Tiwari Deputy Coordinator, UGC-STRIDE Department of Genetics Maharshi Dayanand University Rohtak-124001, Haryana Email: stridemdu2021@gmail.com
Contact details	For further details you can contact followings - Prof. J. P. Yadav, Coordinator, 9416474640 Prof. Munish Garg, Deputy Coordinator, 9812588857 Dr. S. K. Tiwari, Deputy Coordinator, 9996006990

#### Note:

1. The participants will undergo various training programs for the duration of 5-10 days each. They will have to attend these training programs physically organized time to time in the university and other reputed educational and research institutions/industries in India. There can be field/industry visits also to get exposure to the participants.
2. The selection of participants will be purely temporary and co-terminus with the project.
3. The selected participant will be informed by email.

**Nature of the Program:**

Under this program, participants will be motivated and trained to perform basic research leading to trans-disciplinary innovations in the area of natural products, their health impact and socioeconomic importance. They will be inspired to think critically for pros and cons of applications of natural products for human welfare and economic developments. This will be achieved by organizing various courses, workshops and seminars by related subject experts from reputed institutions. This will involve scientists from different national laboratories, top universities and institutions in India and abroad. In future, these schemes may be used by the participants to lead their idea for pursuing research. The training and workshop will be conducted under the thrust area to sensitize the participants and encourage them to get into research activities leading to innovation. The emphasis will be given to train them to apply for innovative research projects and product development useful for human health.

In this program, the selected participants will be trained in the field of various aspects of natural products as mentioned below-

1. Understanding diversity, conservation and identification of natural habitats of plants, animals, microbes etc with traditional and ethnic importance. Review of ancient Indian literatures describing natural products will be highlighted.
2. Purification and characterization of active compounds from natural products for application in food, medicine and agriculture sectors.
3. The modern techniques such as genomics, proteomics, metabolomics, system biology, big data analysis etc will be used to train the manpower for creating further interest in the field.
4. The participants will be connected with the recent information available to government, non-government national and international organizations involved in promoting research and innovation in the area of natural products.
5. The motive of the training is to develop passion among the participants to carry research and pursue their career in the area of natural product research.

**Critical thinking:** The candidates will be trained through various workshops, seminars and interactive sessions, and will be motivated for critical thinking and problem solving skills. For

this, short competition and quiz program based on the importance of natural products will be organized to ignite the young mind for critical thinking. The short term projects will be assigned to the young researchers which will be based on real life problems.

**Faculty Resources:** A panel of expert active in research of natural products will be made from national and international institutions. These experts will consist of scientists and academicians from top Indian Institutions, Universities and established industries etc. The emphasis will also be give to use the experienced mind of our retired but active manpower to motivate the participants to pursue their career in the area of research and innovation.

**Collaborations and Partnerships:** The training program will be done in collaboration with the regional, state and national level institution involved in the area of research in natural products. The initiative will be taken to invite the suggestions for better implementation of the project.

**Criteria of Selection:** The participants will be selected on the basis of following criteria but not limited to -

1. Young faculty at the level of Assistant Professor, junior scientists and PhD students.
2. Academic marks in UG and PG.
3. Working/research interest in the field of natural products.
4. Having academic back ground in natural science, life science biological science and related subjects.
5. Evidence of involvement in research in terms of publication, project, books, monographs etc.

**Training Strategies:** The participants will be trained to understand the importance of nature-derived products on food, medical and agriculture sectors. The training strategies will be to highlight the importance of natural products in comparison to other commercial products used in various applications. They will be motivated develop their career in the area of research and development in natural products.

**Innovations:** The participants will be trained using novel and innovative methods involving close group discussion, lab to land approach, societal and economic importance of natural products etc. The interest among the participants will be created by understanding their views about nature and nature-derived products. They will be motivated to pursue higher study and choose career in the field. Online and offline digital and computational tools such as PPT,

videos, webinar, short stories, social and electronic media etc will be used while delivering lecture.

**Expected outcomes:** The program will be able to generate trained manpower in the area of importance of natural products with higher vision of research and innovation. The young faculties and students will get training to solve the local problems related with food and health using nature-derive products. This will leads to the discoveries related with health and socioeconomic importance of natural products in the country. Thus program will support the national thrust area, Make in India which is one of the priority area of the government.