



## UPCOMING EVENTS

- **One-Day Workshop on 'Communication Skills Required for Teaching' on 15<sup>th</sup> Dec., 18.**
- **National Faculty Development Program on Entrepreneurship Development from 10<sup>th</sup> -21<sup>st</sup> Dec., 18**
- **TEQIP-III Sponsored One Week Faculty Development Program on Best Manufacturing Practices in Industries from 17<sup>th</sup> -21<sup>th</sup> Dec., 18**
- **International Conference on Semiotic Approach to Feminist Studies from 18<sup>th</sup> -19<sup>th</sup> Dec., 18**

## PATRON

**Prof. Sanjeev Jain**  
*Hon'ble Vice Chancellor*

## CHAIRPERSON

**Dr. Amitabh V. Dwivedi**

## EDITORIAL TEAM

**Ms. Surbhi Sharma**  
**Dr. Simranpreet Kaur**

## DESIGN & DRAFT:

**Mr. Girdhari Lal Sharma**

## PHOTOGRAPHY:

**Mr. Om Parkash**

## Campus Jottings

### SMVDU Organises One-Week FDP on Academic Writing



SMDVU Katra, 01<sup>st</sup> Nov. 2018. The School of Languages & Literature at Shri Mata Vaishno Devi organised one-week Faculty Development Programme (FDP) on the theme, titled "Academic Writing: Theory & Praxis" (01-06 November 2018) where Prof. D. Mukhopadhyay, Dean, Faculty of Management & Humanities & Social Sciences, graced the occasion as the Chief Guest. Talking on the theme of the FDP, Dr. Amitabh V. Dwivedi, Coordinator (FDP) & Head of the School, briefed that the programme was relevant for both established faculty members and emerging researchers as it dealt with the topics related to plagiarism; abstract writing; hypothesis formulation; academic & non-academic writing; and others. Further, Prof. Mukhopadhyay was full of praise for the School, and appreciated it for organising academic activities, such as conferences, seminars, conclaves, summer schools, workshops, and alike on regular basis. Dr. Anurag Kumar, Convener of the FDP, informed that the speakers from Fraser Valley University (Canada); NIT, Patna; Banasthali University; University of Ahmadabad; and in-house faculty members delivered expert lectures on academic writing. The School received a huge participation from different Indian states as well as from the J&K region. The inaugural ceremony concluded with a vote of thanks presented by Dr. Simran Preet Kaur.

### SMVDU Students Visited IIAS, Shimla, during Educational Tour



SMVDU Katra, Nov. 2018. Shri Mata Vaishno Devi University is famous for imparting out-of-the-box learning to its pupils, and in this context the School of Languages & Literature recently organised an educational tour to Indian Institute of Advanced Study (IIAS), Shimla, where the students and research scholars of Languages & Literature visited the prestigious institute and got a chance to get acquainted with the glorious past of the country. Around 40 students and research scholars along with the faculty members, namely Dr. Amitabh V. Dwivedi, Dr. Simran Preet Kaur and Dr. Ranbir Kaur, who assisted the students to Lalit Kala Academy; State Library; State Museum; and other buildings of literary and cultural importance during their four-day visit. The students showed keen interest in the rich literary and cultural heritage of the region, and their conduct during the tour was well appreciated, as reported by Dr. Dwivedi, Coordinator of the educational tour & Head of the School. The students thanked the Coordinator for organising such academic activities in the School, and hoped for such learning experiences in future as well. The tour was the part of extension learning activities, regularly held in the school each semester. All students submitted a report on their return, and awarded with a certificate. Dr. Amitabh V. Dwivedi expressed his gratitude to Dr. Sanjeev Jain, Vice-Chancellor (SMVDU), for providing the School with such opportunity for collaborative learning.

### **Vice-Chancellor, SMVDU Chairs Directorate of Quality Assurance Meeting**

SMVDU Katra, 14<sup>th</sup> Nov. 2018. The Directorate of Quality Assurance (DQA) at Shri Mata Vaishno Devi University (SMVDU), Katra, organised its 4<sup>th</sup> Meeting under the Chairmanship of Prof. Sanjeev Jain, Vice-Chancellor, SMVDU, which was attended by Registrar, SMVDU; Additional CEO, Shrine Board; Finance Officer; Administrative Officer; Deans and Head of various Schools and Section Heads, as reported by the Media Cell, SMVDU. The meeting commenced with the minutes confirmation of 3rd Meeting, and the Action Taken Report based upon them. Further, the agenda items of the present meeting were discussed, including facilitating the creation of a learning-centric environment; development and maintenance of institutional database through MIS; development of quality culture in the institution; initiatives taken up by the DQA for performance monitoring; review of question papers; student feedback on teaching learning; among others. Notably, the faculty members and administration of Shri Mata Vaishno Devi University is committed to make SMVDU a world-class university, and in this direction positive steps had already been taken. Significantly, the university has been listed in the NIRF ranking, MHRD under top 100 Indian universities and found mention in Times Ranking List. The meeting concluded with a vote of thanks presented by Prof. Garg, Director, DQA, SMVDU.



### **Vice-Chancellor SMVDU Chairs Faculty Development Centre Meeting**

SMVDU Katra, 23<sup>rd</sup> Nov. 2018. Dr. Sanjeev Jain, Vice Chancellor, Shri Mata Vaishno Devi University (SMVDU), Katra, chaired the maiden meeting of Faculty Development Centre on Campus. The Ministry of Human Resource Development, Govt. of India, has recently approved the up-gradation of existing Human Resource Development Centre (HRDC) to Faculty Development Centre (FDC) at SMVDU under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching Scheme, informed Mr. Vora, Technical Officer, FDC, SMVDU. Notably, the SMVDU is the only approved centre in the J&K State. The meeting



was attended by Coordinators and Co-coordinators (FDC); Dr. Rakesh Jha, Associate Dean, R&D; Mr. Romesh Singh, Finance Officer; Mr. Vinod Sharma, Admn. Officer; Mr. Kamal Sharma, University Engineer, and others. The Vice-Chancellor congratulated the team on the up-gradation of HRDC to FDC at SMVDU, and approved the activities to be taken up by the Faculty Development Centre (FDC) during the academic session 2018-19, while the emphasis was on delivering the maximum throughput to the intellectual fraternity, including neighbouring states, especially with a focus on benefitting the teachers of border/remote areas of J&K. The meeting concluded with a formal vote of thanks presented by Prof. D. Mukhopadhyay, Coordinator, FDC, SMVDU.

## Dean, Humanities & Social Sciences Chairs BOS Meeting

SMVDU, Katra, 26<sup>th</sup> Nov. 2018. The School of Philosophy & Culture (SoPC) of Shri Mata Vaishno Devi University (SMVDU), Katra, convened its Board of Studies meeting on 26<sup>th</sup> Nov. 2018 in the Conference Room of the Faculty of Humanities and Social Sciences (FoHSS) which was chaired by Prof. (Dr.)



D. Mukhopadhyay, Dean, FoHSS. The meeting was attended by Prof. (Dr.) Sanil V. from the Dept. of Humanities and Social Sciences, IIT Delhi; Dr. Sumeet Gupta, Associate Dean (Academic Affairs), SMVDU; Dr. Anil Kumar Tewari, Head, SoPC; Dr. Madhu Mangal Chaturvedi, Asst. Prof. and Mr. Sumanta Sarathi Sharma, Asst. Prof., SoPC. The Board discussed the matters pertaining to different courses offered by the School of UG and PG students of engineering and sciences. The School placed a proposal of the Project for Epistemic and Spiritual Empowerment of People (PESEC) before the members of the Board. Under this open project, the School envisages to launch different certificate courses useful for various working group in the society. The Board also discussed the possibility of offering a postgraduate program in the Vedic Studies along with the existing Master of Philosophy and PhD programs. The proceeding was conducted by the Head of the School, Dr. Tewari. The meeting concluded with a vote of thanks.

## Training On "Linux (Ubuntu) & Libre Office" Starts at SMVDU



SMVDU Katra, 26<sup>th</sup> Nov. 2018. A TEQIP-III sponsored one-week hands-on training on "Open Source Software Linux (Ubuntu) & LibreOffice" (26-30 November, 2018) started at Shri Mata Vaishno Devi University (SMVDU), Katra. This training program was organized in collaboration with IIT, Bombay, Spoken Tutorial, NMEICT, (MHRD). The key objective of the hands-on training to encourage the use of Free and Open Source Software (FOSS) in academic and industry sector. In this context, the non-teaching staffs of SMVD University got trained in the first phase of this program. Mr. Vipin K. Gupta, Director, U-Net Solutions & U-Net Labs Private Ltd., delivered the expert lecture on hands-on training during one-week program. Dr. Sachin K. Gupta, Assistant Professor, SoECE & Central Co-ordinator, Spoken Tutorial Project, SMVDU stressed that the conduction of this program became possible with the support of Ms. Hajra Bano, Training Coordinator (J&K), Spoken Tutorial Project, NMEICT, MHRD, IIT Bombay and Dr. Sumeet Gupta, Associate Dean (Academic Affairs) & TEQIP-III Co-ordinator, SMVDU. Dr. Gupta, thanked, Prof. Sanjeev Jain, Vice-Chancellor, SMVDU for his constant motivation and valuable support.

## 84<sup>th</sup> Annual Conference of Indian Mathematical Society organized at SMVDU



SMVDU Katra, 27<sup>th</sup> Nov. 2018. The 84<sup>th</sup> Annual Conference of Indian Mathematical Society (IMS), an international meet, inaugurated at Shri Mata Vaishno Devi University (SMVDU), Katra on 27<sup>th</sup> November 2018, where Prof. Manoj Dhar, Vice-Chancellor of Jammu University, graced the event as the Chief Guest. Dr. A. K. Das, Organizing Secretary of the Conference, informed that IMS was the oldest and largest mathematical society of the country, established in 1907, and this time it organised its annual meet at SMVDU. Prof. Sanjeev Jain, Vice-Chancellor, SMVDU spoke on the importance of Mathematics while stressing upon the fact that mathematical methods are not only used in science and engineering but are to be used extensively in economics, medicine, agriculture, architecture, arts and all other fields of modern knowledge. Prof V. K. Bhat, Dean, Faculty of Sciences, asked the young participants to interact with experts from and outside the country. Prof Sudhir Ghorpade, President of Indian Mathematical Society, spoke on the role of history in learning and teaching Mathematics. Prof N. K. Thakare, General Secretary of the Conference, gave information about the society and announced various awards for 2018. Prof. Peeyush Chandra, Academic Secretary of the Conference, informed about the academic program of the conference. During the four days of the conference, Prof. Steven Dale Cutkosky, Univ. of Missouri, USA; Prof. Dona Strauss, Univ. of Leeds, England; Prof. H. Garth Dales, University of Lancaster, England; Prof. Mahmoud Filali, Univ. of Oulu, Finland; Prof Ali Taheri, Sussex University, UK; Prof. Trygve Johnsen, Univ. of Tromso- the Arctic University of Norway; Prof. M. Vanninathan, IIT Bombay; Prof. Jugal K. Verma, IIT Bombay; Prof. S. S. Khare, NEHU, Shilong; Prof. Ajay Kumar, University of Delhi and many other speakers from different institutions of India delivered their talks. Six symposia were organized which were conducted during the conference. Participants from all over India and abroad presented their research papers in the conference. Prof. V. Verma, Dr Uday Pratap Singh, Dr Kuldeep Raj, Dr Sandeep Bhougal, Dr Rakesh Kumar, Dr Surender Singh, Dr Sandeep Sharma, and others were present during Conference.

# External Expert

## IIT Professor Delivers Lectures at SMVDU

SMVDU Katra, 02<sup>nd</sup> Nov. 2018. Prof. Prabhakar Singh, Department of Physics, IIT-BHU, Varanasi and Adjunct Professor, School of Physics, delivered lectures for three days at Shri Mata Vaishno Devi University, Katra. This lecture series was the part of extension activities, regularly conducted by various schools at SMVDU through which they impart quality education to students. Prof. Ashok K. Sharma, Head, School of Physics, welcomed Prof. Singh and informed that the esteemed professor had more than 20 years of experience as well as many national and international awards to his credit. Prof. Singh delivered lectures on topics, related to electronics, particularly on measurements and control systems, transducers, boxcar integrators and high frequency devices: generators and detectors. The students of Physics got benefitted from the lectures as they were informative, while taking care of UGC-CSIR (NET) syllabus, as reported by Dr. Vivek K. Singh, Coordinator of the event. He, further, thanked Dr. Sanjeev Jain, Vice-Chancellor, SMVD University for establishing a collaborative teaching-learning environment through extension lectures which motivate students and providing them with ideas for future research.



## Former VC VIT & Ex-Director IIT Delhi addresses FDP at SMVDU

SMVDU Katra, 04<sup>th</sup> Nov. 18. The School of Languages & Literature at Shri Mata Vaishno Devi University, Katra, organised expert lectures by Prof. D. P. Kothari, former Vice-Chancellor, VIT, Vellore and ex-Director, IIT, Delhi, on how to publish a book, research papers, and academic articles during one-week (01-06 Nov. '18) Faculty Development Programme (FDP) on 'Academic Writing: Theory & Praxis'. The session was attended by participants, research scholars and faculty members, and they expressed their gratitude to the esteemed professor, as reported by Dr. Anurag Kumar, Convener, FDP. Notably, Prof. Kothari has published 50 books on prominent topics and 830 academic papers in national and international journals of good repute. Prof. Kothari, a multilingual in 10 languages, motivated and inspired the participants for publishing quality papers, articles and books for their academic growth as well as for the progress of their respective institutions. Dr. Amitabh V. Dwivedi, HoD, School of Languages & Literature, presented a vote of thanks to Prof. D. P. Kothari for his time and words of wisdom.



# Celebration & Day Observed

## World Philosophy Day Celebrated at SMVDU



SMVDU Katra, 15<sup>th</sup> Nov. 2018. The School of Philosophy & Culture (SoPC) of Shri Mata Vaishno Devi University (SMVDU), Katra celebrated the World Philosophy Day on 15<sup>th</sup> Nov. 2018. On this occasion, a special lecture on "Challenge to Reason and the Doctrine of Momentariness" was conducted where Prof. Kisor Kumar Chakrabarti, (retd.), Distinguished Professor & Chair of Philosophy and Religion, Dept. of Religion & Philosophy, Davis and Elkins College, USA and Adjunct Professor, SoPC, SMVDU, talked about the Greek philosopher Zeno's paradox and 11<sup>th</sup> century AD Nyaya philosopher Udayanacarya's prati-bandha-asiddha argument against the Buddhist doctrine of momentariness. The lecture was attended by the faculty members, students and staff members of different schools and sections. The World Philosophy Day was proclaimed by UNESCO to be celebrated every 3<sup>rd</sup> Thursday of November which is a speculative date of birth of the famous Greek philosopher Socrates. It was first celebrated on 21<sup>st</sup> November 2002, since then the Day is celebrated every year under the leadership of UNESCO. By celebrating the World Philosophy Day, the enduring value of philosophy for the development of human thought, for each culture and for each individual is highlighted. The celebration was concluded with a vote of thanks by Mr. Sumanta Sharma, Asst. Prof., SoPC. Vice-Chancellor, SMVDU, Prof. Sanjeev Jain, congratulated the philosophy fraternity on the Day.

## Indian Constitution Day Celebrated at SMVDU

SMVDU Katra, 26<sup>th</sup> Nov, 18. The School of Philosophy & Culture (SoPC) at Shri Mata Vaishno Devi University organised a panel discussion to celebrate the Indian Constitution Day which was declared by the Government of India in 2015 to commemorate the 125<sup>th</sup> birth anniversary of Ambedkar, who had chaired the drafting committee of the Constituent Assembly and played a pivotal role in the drafting of the constitution. Dr. Anil K. Tewari, Head, SoPC, discussed the significance of 26<sup>th</sup> November, and further elaborated that on this day Constituent Assembly of India adopted the Constitution of India partially, and the whole constitution came into effect from 26<sup>th</sup> January 1950. Moreover, all the relevant clauses required for holding elections. constitutionally were activated on this date. Among the panelists were Mr. Sumantha Sarathi Sharma and Dr. Madhu Mangal Chaturvedi, Assistant Professors from SoPC, Dr. Anurag Kumar and Ms. Isha Malhotra, Assistant Professors, School of Languages and Literature; Dr. Arti Maini and Dr. Rashi Taggar, Assistant Professors, School of Business. The panel discussion was also attended by post-doctoral and doctoral students of different Schools.



# Faculty/Staff Updates

## SMVDU Faculty Delivers Invited Talk at JNU, New Delhi

SMVDU Katra, 19<sup>th</sup> Nov. 2018. Dr. Amitabh V. Dwivedi, Head, School of Languages & Literature, Shri Mata Vaishno Devi University (SMVDU), Katra delivered a talk on "Linguistic Structures of Lesser-known Languages of Jammu & Kashmir" in Bhartiya Bhasha Sangam, a national seminar, organised by the School of Sanskrit & Indic Studies, JNU, New Delhi in collaboration with Uttar Pradesh Bhasha Sansthan, Lucknow from 16 to 18 Nov. 2018. Notably, Dr. Dwivedi has been working assiduously to revitalise the lesser-known and endangered languages of the Jammu & Kashmir region. Further, he informed that three of his research scholars, namely Mr. Ravi Parihar, Ms. Ayushi and Akanksha Sharma, had also participated and presented their papers on Punchi; Sarazi and Bhadarwahi languages. Dr. Dwivedi also emphasised that scientific methodology should be applied for finding out whether a language is major language or a language variety. His paper highlighted four lesser-known undocumented languages: Pongli, Padari, Bhalesi, and Sarazi. The academicians and research scholars appreciated his talk, and delighted to know that serious work has been conducted on Jammu & Kashmir languages. Dr. Sanjeev Jain, Vice-Chancellor, SMVDU congratulated the faculty member for saving and documenting languages and culture of J&K.



## SMVDU Faculty Delivers Invited Talk at BITS, Pilani

SMVDU Katra, Nov, 18. Dr Arif Billah Dar, Assistant Professor, School of Economics, Shri Mata Vaishno Devi University (SMVDU), Katra, delivered an invited talk at School of Social Sciences & Humanities, BITS, Pilani Dubai Campus. The title of his talk was "Exchange Rate: Determination & Volatility in India". The talk was attended by the students, research students and faculty members of BITS Pilani, Dubai Campus. Dr. Arif Billah thanked the administration and expressed his gratitude to Dr. Sanjeev Jain, Vice Chancellor, SMVDU for giving him an opportunity to showcase his research.



## SMVDU Faculty Delivers Talk at International Conference

SMVDU Katra, 05<sup>th</sup> Nov. 2018. Dr. Rakesh Kumar of School of Mathematics, Shri Mata Vaishno Devi University, Katra delivered an invited talk on "Applications of Queuing Systems with Customers' Impatience" in the 27th International Conference of Forum for Interdisciplinary Mathematics (FIM) in association with 3rd Convention of IARS on Interdisciplinary Mathematics, Statistics and Computational Techniques (IMSCT 2018 –FIM XXVII), held during Nov. 02-04, 2018 in the Dept. of Statistics, Uni. of Jammu. Dr. Kumar discussed the important applications of queuing models with customers' impatience in supply chains, perishable inventory systems, computer-computer-communication networks, order picking systems, and in hospitals. He highlighted the role of transient solutions for queuing models as the real life systems normally work under certain time frames-the time-dependent performance measures assume a great significance in analysing such systems. He also chaired a symposium on "Queuing Theory and its Applications" where a number of speakers shared their research work in the area of queuing theory. Dr. Kumar expressed his gratitude to the organisers of conference.



## SMVD University Faculty Presents Paper in World Congress, Greece

SMVDU Katra, 13<sup>th</sup> Nov. 2018. Mr. Sumanta S. Sharma, Assistant Professor, School of Philosophy & Culture (SoPC), Shri Mata Vaishno Devi University (SMVDU), Katra presented a research paper in the World Congress on "Square of Opposition", held in Orthodox Academy of Crete, Greece (01-05 November 2018) which was much appreciated by the researchers and academicians. The 6th World Congress was organized on the square of opposition after successful previous editions in Montreux, Switzerland 2007; Corté, Corsica 2010; Beirut, Lebanon 2012; Vatican, 2014; Easter Island, 2016, as reported by Mr. Sharma. During this interdisciplinary event gathering, Mr. Sharma got an opportunity to interact with logicians, philosophers, mathematicians, semioticians, theologians, cognitivists, artists and computer scientists. The faculty member thanked his research guides, namely Dr. Anil K. Tewari, Head, SoPC and Dr. Madhu Mangal Chaturvedi, Faculty, SoPC for their guidance and motivation, and further expressed his gratitude to Dr. Sanjeev Jain, Vice-Chancellor, SMVDU for providing him with this opportunity to discuss contemporary issues related to modern logic.



## SMVDU Faculty Delivers Invited Talk at Paris

SMVDU Katra, 22<sup>st</sup> Nov. 2018. Dr. Sharada M. Potukuchi, a Plant Scientist & Faculty, Biotechnology, Shri Mata Vaishno Devi University (SMVDU), Katra presented her research in the international conference organised in Paris, France. During her keynote address on "Medicinal Plant Biotechnology in India", Dr. Potukuchi focused on the therapeutic compounds derived from herbs that are major part of medical prescriptions worldwide. The organisers, namely the Allied Academy, recognised the research potential of Dr. Potukuchi, and invited her for the event. The faculty member also presented results of her recent work, carried out along with her doctoral candidate, Ms. Savita Sharma, through an oral presentation on "Annual Variation in the Production of Boeravinone B in Different Plant Parts of *Boerhaavia diffusa* L. - A Medicinally Important Herb". Notably, the conference was attended by plant researchers from leading universities and research institutions worldwide, including US, Europe, Middle East, South Asia, and South America. Dr. Sanjeev Jain, Vice Chancellor, SMVDU believed that academic interaction would help strengthen international collaborations and joint research projects so much so to elevate the research aptitude in SMVDU. Dr. Sharada expressed her gratitude to Dr. Sanjeev Jain for providing her with this opportunity to share her expertise with researchers from allied fields of plant sciences and natural medicine.



## Papers Published/Presented/Invited Talks

Dr. Anil Kumar Tewari delivered an invited lecture on "Understanding Interconnectedness of Human and Environment" at the Centre for Comparative Religions and Civilizations, Central University of Jammu, Samba, on the occasion of the celebration of the World Philosophy Day on 19th November 2018.

Dr. Ashoka Kumar Tarai, Asst. Professor, School of Philosophy & Culture, presented a paper entitled as "The (In)visibility of Value: A Wittgensteinian Perspective" an International conference organized by HSS Department, IIT Bobmay, from 24<sup>th</sup> -26<sup>th</sup> Nov, 2018 on the theme "Wittgenstein on Culture and Value".



# Student Updates

## SMVDU Scholar Presents Paper at University of Geneva

SMVDU Katra, Nov., 18. The research students of Shri Mata Vaishno Devi University (SMVDU) never miss a chance to bring laurels to the institution. Until recently, Ms. Verruchi Gupta, SRF, School of Biotechnology, presented a research paper entitled "Cloning & NGS analysis of gene encoding Asparaginase enzyme from a glacier in Northern Western Himalayas, J&K, India" in the 3<sup>rd</sup> International Conference on Clinical Metagenomics 2018 (ICCMg3) at University of Geneva, Switzerland. This prestigious international conference was organized by La fondation privée des HUG, Geneva, where more than 200 scientists and delegates from UK, USA, Japan and European countries attended and presented their researches. Notably, Ms. Verruchi was the only flag-bearer from India who has been pursuing her doctoral research under the supervision of Prof. V. Verma and Dr. Shafaq Rasool in the School of Biotechnology, SMVDU. The candidate thanked her supervisors for their support and guidance, and expressed her gratitude to Dr. Sanjeev Jain, Vice-Chancellor, SMVDU for providing doctoral students with a conducive environment for research in the university.



## Basoli Hostel Wins Inetr-Hostel Cricket (Men) Tournament

SMVDU Katra Nov., 18. A week long Inter hostel Cricket Men tournament concluded at Shri Mata Vaishno Devi University. Total Seven teams from different hostels participated in the competition. In the final match, Basoli Hostel (PG Students) defeated Vindhyachal Hostel (B.Tech final year students) by 7 wickets. Batting first, Vindhyachal Hostel scored 115 runs for the loss of 6 wickets in 15 overs. In reply, Basoli Hostel chased the score in just 13.4 overs for the loss of 3 wickets. Mr. Harsh Sharma (Senior PG Student) was adjudged as a Man of the tournament. Sh. Ashok Kumar Director Sports, SMVDSB, and Mr. Rajiv Kumar, Incharge Sports, SMVDU, were present during the occasion. The tournament were officiated by Sports Coach Sh. Sucha Singh and Mr. Sumit sharma.

