



GNDEC NEWS LETTER

PRODUCTION ENGINEERING

An autonomous college u/s 2(f) and 12 (B) of UGC Act-1956

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Director

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HoD (P.E)

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Ex. Principal

DIRECTOR'S MESSAGE

It gives me immense satisfaction that next issue of Production Engineering newsletter is ready for the readers. This newsletter mirrors the success story of the department and act as a great medium to reach out to the outer world. It reflects upon the persistent and committed efforts made by faculty, staff and students for taking the department one step ahead. Continuing the same tradition, this issue of Production Engineering newsletter, reflects upon commendable contribution made by all members of Production Engineering family in their fields of expertise as well as for the overall growth of the college. I congratulate everyone for their bit of service for the institution and do expect the same in times to come. Wish you good luck!

Editor's message

It is a matter of pride as well as pleasure to present before our readers next issue of Production

Engineering newsletter. We feel honored for the faith reposed in us for performing the role of editors of Production Engineering newsletter. We have put whole-hearted endeavors to give a complete and kaleidoscopic view of laudable achievements of different departments of our college. Through further issues of Production Engineering newsletter, we do hope that we will come up to the expectations of our readers.

Foreign collaborations

Department of Production Engineering has profound research facilities that is why many of the foreign researcher are being collaborated with the manufacturing research lab (GNDEC). On the same line, Dr. Rupinder Singh from MRL visited University of Salerno, ITALY for a conference named "Multi Scale Material and Structures". He presented two papers and proceedings of that

conference were published in Elsevier, Composite Part B.

Annual convocation

Convocation ceremony was held at Guru Nanak Dev Engineering College on 4 MAR 2017. Around 500 students were conferred with a degree. Dr. M.P. Poonia (Vice chairman AICTE) was chief guest of ceremony.



Chief guest Dr. M.P. Poonia (Vice chairman AICTE) Amongst them 50 medalists were there, 05 PhD student were also given degrees. Manoj Verma, Parminder Singh, Gulvir Singh, Sukhinderpal Singh, Gursharan Singh from Production Engineering got their M Tech degree also. Sudhir kumar from regular M Tech got Gold medal and Atul Babbar from same branch got Silver medal. Gursharan Singh and Gulvir Singh form part time Production Engineering got their Gold and Silver medal respectively.

Co-Curricular Activities

Sports meet of Guru Nanak Dev Engineering College was held on 3-4 Mar 2017 in which many students from different engineering streams participated. S. Bhupinder Singh Dhillon (Maharaja Ranjit Singh Awardee) was the chief guest for this event.



Inauguration ceremony of sports meet



Chief Guest Bhupinder Singh Dhillon

In faculty 4*100 relay race Production Engineering department won Gold medal by retaining its previous record.

GNDEC college fest **GENESIS** was organised on 6-7 Mar 2017 at open-air theatre. First day was full of events and bhangra was the main attraction of the college fest. Col. Rajeev Bagga was the guest of honour and chief guest was Gurbhajan Singh Gill (Punjabi writer).



Col. Rajeev Bagga and Gurbhajan Singh Gill receiving token of appreciation

On 2nd day of the fest Punjabi singer Manmohan Waris was main attraction.



Punjabi Singer Manmohan Waris

In manufacturing research lab two days' workshop was organised on differential scanning calorimeter (DSC). Dr. Vinay Chaudhry from Mettler Toledo gave his expert advice on DSC testing. Around 20 participants from various colleges attended that workshop. Certificates for participation were also distributed after workshop.

A departmental trip was organised by Production Engineering department for MTech students. Under this scheme MTech students visited BHAKRA DAM at Nangal, Punjab. This trip went very successful as student got to learn so much valuable and efficient views and matters from experts present at Bhakra Dam. Er. Rohit Sharma and Er. Manjot Singh Bedi were mentor for this tour.

Another departmental trip to Kartar Agro was organised by Production Engineering department. Under this, students from B Tech and MTech gained knowledge about agricultural technology.

Dr. J.S.Grewal got additional charge of DSW , chairman students grievance committee and appointed as member of BOG in Guru Nanak Dev Engineering College, Ludhiana.

Production Engineering department has extended MRL lab to next floor and new machines are being setup at same location. MRL lab was inaugurated by Prof. Kirpal Singh Badungar, president SGPC on 9

March 2017, along with various dignitaries including Director GNDEC, Ludhiana.



Prof. Kirpal Singh Badungar inaugurating MRL

New 3D printer has been purchased for Production Engineering department for help of PhD students working in lab. MRL is also giving consultancy service to many colleges.

Proceeding of COPE 2016 were published in International Journals:

- 'International Journal of Advanced Mechatronics and Robotics'. Serial Publications, New Delhi.
- 'International Journal of Materials Science and Engineering'. Serial Publications, New Delhi'.

Departmental Publications

Fracture Behavior of Welded Aluminum Alloy at High Strain Rates

R Singh, S Chauhan, PC Gope, Procedia Engineering 173, 1246-1250

Investigating the friction coefficient in functionally graded rapid prototyping of Al-Al₂O₃ composite prepared by fused deposition modelling

R Singh, S Singh, Assembly Automation 37 (2)

Combinatorial effect of curcumin with docetaxel modulates apoptotic and cell survival molecules in prostate cancer.

S Banerjee, SK Singh, I Chowdhury, R Singh, Frontiers in bioscience (Elite edition) 9, 235

Investigation for surface finish improvement of FDM parts by vapor smoothing process

R Singh, S Singh, IP Singh, F Fabbrocino, F Fraternali, Composites Part B: Engineering 111, 228-234

Investigations for improving the surface finish of FDM based ABS replicas by chemical vapor smoothing process: A case study

R Singh, J Singh, H Singh, Assembly Automation 37 (1)

Some investigations on surface roughness of aluminium metal composite primed by fused deposition modeling-assisted investment casting using reinforced filament
S Singh, R Singh, Journal of the Brazilian Society of Mechanical Sciences and Engineering 39 ...

Material issues in additive manufacturing: A review
S Singh, S Ramakrishna, R Singh, Journal of Manufacturing Processes 25, 185-200

Dimensional accuracy and surface finish of biomedical implant fabricated as rapid investment casting for small to medium quantity production

J Singh, R Singh, H Singh, Journal of Manufacturing Processes 25, 201-211.

Recycling of plastic solid waste: A state of art review and future applications.

N. Singh, D.Hui, R. Singh, I .Ahuja, L Feo, F. Fraternali. Composites Part B: Engineering.1-14.

Polymer Single-Screw Extrusion With Metal Powder Reinforcement.

R .Singh,N. Singh,P. Bedi,I. Ahuja. Reference Module in Materials Science and Materials Engineering, Publisher: Elsevier Ltd.2016 pp: 1-18

Waste management by recycling of polymers with reinforcement of metal powder

R .Singh,N. Singh,F. Fabbrocino, F. Fraternali, I.Ahuja , Composites Part B: Engineering. 2016 vol: 105 pp: 23-29