

Brief CV



Personal and Educational Details

Employee Name	@IITD Since	Department & Designation
DEO RAJ KAUSHAL	2004	Civil Engineering , Associate Professor

Degree	Specialization	Institute/University	Year
BE	Civil Engineering	AMU Aligarh	1988
ME	Hydraulic Structures	AMU Aligarh	1990
Ph.D.	Sediment Transport	IIT Delhi	1996

Research Areas and Highlights

Hydraulic and Water Resources Engineering, Computational Fluid Dynamics, Sediment Transport, Hydraulic Structures, Slurry Pipeline, Flow Instrumentation.

Experience

Dr. Deo Raj Kaushal carried out his Ph.D. at IIT Delhi and Post Doctoral Research at KIT Japan in the field of sediment transport through pipeline and open channel. He has been an Associate Professor of Hydraulics in Civil Engineering Department at IIT Delhi since 2010, Assistant Professor at IIT Delhi during 2004-2010 and Lecturer at VNIT Nagpur during 1994-2004. During his teaching and postdoctoral research, he has carried out several research and consultancy projects. He has worked with several mining, mineral-processing and production companies, either through direct consultation or through collaboration with other companies or research organizations.

Teaching Experience

22 Years, 2 Months

Industrial Experience

0 Years, 0 Months

Significant Publications

- Kaushal, D.R., Kumar, A., Tomita, Y., Kuchii, S. And Tsukamoto, H. (2013), "Flow of Mono-Dispersed Particles through Horizontal Bend", International Journal of Multiphase Flow, Elsevier Publications, Vol 52, June 2013, pp 71-91. , Journal , International
- Kaushal, D.R., Thinglas, T., Tomita, Y., Kuchii, S. And Tsukamoto, H. (2012), "CFD Modeling for Pipeline Flow of Particles at High Concentrations", International Journal of Multiphase Flow, Elsevier Publications, Volume 43, July 2012, pp 85-100. , Journal , International
- Kaushal, D.R. and Tomita, Y. (2013), "Prediction of Concentration Profiles for Pipeline Flow of Highly Concentrated Slurry", Particulate Science and Technology, An International Journal, Taylor and Francis Publications, Volume 31, Issue 1, January 2013, pp28-34. , Journal , International
- Kaushal, D.R. and Kumar, N. (2013), "OPTIMUM DESIGN OF HIGH CONCENTRATION FLY ASH SLURRY DISPOSAL PIPELINE", ELECTRONIC JOURNAL OF POLISH AGRICULTURAL UNIVERSITIES, Vol.16, Issue 4, 2013. , Journal , International
- Kaushal, D.R., Thinglas, T., Tomita, Y., Kuchii, S. And Tsukamoto, H. (2012), "Experimental Investigation on Optimization of Invert Trap Configuration for Sewer Solid Management", Powder Technology, An International Journal, Elsevier Publications, Volume 215-216, Issue 1, January 2012, pp 1-14. , Journal , International
- Kaushal, D.R., Kumar, A., Tomita, Y., Kuchii, S. And Tsukamoto, H. (2016), Flow of bi-modal slurry through horizontal bend, In Press. KONA Powder and Particle Journal, An International Journal, Vol. 34 , Journal , International
- Kumar, N., Gopaliya, M.K. and Kaushal, D.R. (2016), Modeling for slurry pipeline flow having coarse particles, In Press. Multiphase Science and Technology, An International Journal, Vol. 28, Issue 1. , Journal , International

- Gopaliya, M.K. and Kaushal, D.R. (2016), Modeling of sand-water slurry flow through horizontal pipe using CFD, International Journal of Hydrology and Hydromechanics, Vol. 64, 2016, Issue 3, pp 261-272. , Journal , International
- Mohsin, M. and Kaushal, D.R. (2016), 3D-CFD Validation of Invert Trap Efficiency for Sewer Solid Management using VOF Model, Water Science and Engineering, An International Journal, Elsevier Publications, Vol. 9, 2016, Issue 2, pp 106-114 , Journal , International
- Assefa, K.M. and Kaushal, D.R. (2015), A New Model for the Viscosity of Highly Concentrated Multi-Sized Particulate Bingham Slurries, Particulate Science and Technology, An International Journal, Taylor and Francis Publications, In Press. , Journal , International
- Mohsin, M. and Kaushal, D.R. (2015), A 2D-CFD (VOF -model) Analysis of Invert Trap for Bed Load Removal in an Open Rectangular Sewer Drain, Particulate Science and Technology, An International Journal, Taylor and Francis Publications, In Press. , Journal , International
- Assefa, K.M. and Kaushal, D.R. (2015), A comparative study of friction factor correlations for high concentrate slurry flow in smooth pipes, International Journal of Hydrology and Hydromechanics, Vol. 63, 2015, Issue 1, pp 13–20. , Journal , International
- Gopaliya, M.K. and Kaushal, D.R. (2015), Analysis of Effect of Grain Size on Various Parameters of Slurry Flow through Pipeline Using CFD, Particulate Science and Technology: An International Journal. Vol.33, Issue4, pp 369-384. , Journal , International
- Assefa, K.M. and Kaushal, D.R. (2015), Experimental study on the rheological behaviour of coal ash slurries, International Journal of Hydrology and Hydromechanics. Vol.63, Issue4, pp 303-310. , Journal , International
- Kumar, A. Kamarpal, Gupta, S. and Kaushal, D.R. (2014), CFD Modelling of Slurry Flow in Pipeline System for Solid Concentration Distribution, International Journal of Applied Engineering Research (ISSN: 1087-1090), Vol.9, No.7 Special Issue, pp 733-742. , Journal , International
- Kumar, A., Kaushal, D.R. and Kumar, N. (2013), CFD modeling for pneumatic conveying through pipeline system, YMCAUST International Journal of Research (ISSN: 2319-9377), Vol.1, Issue2, pp 65-70. , Journal , International
- Mohsin, M. and Kaushal, D.R. (2016), Experimentation and 3D-CFD (VOF Model) coupled with Stochastic DPM Validation for the Performance Analysis of Invert Trap using Field Sewer Solids. In Press, Particuology, An International Journal, Elsevier Publication. , Journal , International
- Mohsin, M. and Kaushal, D.R. (2016), Experimental & CFD Analysis Using 2D & 3D (VOF-Model) for Invert Trap in an Open Rectangular Sewer Channel. ASCE Journal of Irrigation and Drainage Engineering, Vol. 142, In Press. , Journal , International

Academic and Research Contributions

Research Guidance (Total Nos. & Last 5 Years Data)

Category	Guidance Status	Total Guidance	In last 5 years
B.Tech.	Completed	39	15
M.Tech.	Completed	25	6
Ph.D.	Completed	3	2
Ph.D.	In Progress	7	7

Sponsored Research, Consultancy & Technology Development

Category	Total Projects	Total Value
Consultancy	34	28000000
Sponsored Research Projects	5	13300000

Type of Publication	Level of Publication	Total Publication	In last 5 years
Journal	International	35	18
Journal	National	4	0
Conference	International	26	7
Conference	National	27	6

Patent & IPR

Course Name	L-T-P	Course Belongs To
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RIVER MECHANICS	2-0-2	UG
DESIGN OF HYDRAULIC STRUCTURES	2-0-2	UG
WATER POWER ENGINEERING	3-0-2	UG
HYDROLOGY AND HYDRAULICS	0-0-4	UG
ADVANCED HYDRAULICS	3-0-0	PG
HYDROELECTRIC ENGG.	3-0-0	PG
DESIGN CONCEPTS IN CIVIL ENGG.	0-0-4	UG
INTRODUCTION TO CIVIL ENGINEERING	0-0-4	UG

Awards & Distinctions

Society Membership, Certification & Training & Any Other Details