CURRICULUM VITAE

Amit Shaw

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PERSONAL INFORMATION

Date of Birth	December 09 1978
Place of Birth	Kolkata, India
Citizenship	Indian
Sex	Male
Marital Status	Married

CONTACT INFORMATION

(a) Present :
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EDUCATION

Degree	College/ Institute	Year of Passing	Specialization
PhD	Indian Institute of Science Bangalore	2007	Computational Mechanics
MTech	Indian Institute of Technology Roorkee	2003	Structural Engineering
BE	Bengal Engineering College Shibpore (Now known as IIEST)	2000	Civil Engineering

EXPERIENCE

Nature of Experience	University/ Organization	Designation	Period
Industry	Gammon India Limited	Junior Engineer	25-09-2000 to 10-04-2001
Industry	L&T ECC	PGET	14-04-2003 to 26-12-2003
Post Doctoral Research	University of Aberdeen, UK	Research Fellow	14-11-2007 to 22-07-2009
Teaching	IIT Kharagpur	Assistant Professor	29-07-2009 – continuing

RESEARCH INTEREST

- Impact Mechanics
- Particle based methods
- Low cost protective vest using natural fibers

TEACHING

Under graduate level

- Mechanics
- Engineering Drawing and Computer Graphics
- Theory of Elasticity & Plasticity
- Design of RC Structures
- Design Sessional
- Concrete Laboratory

Post graduate level

- Applied Elasticity and Plasticity
- Numerical Methods in Structural Engineering
- Offshore Structures
- Fluid Structure Interaction

RESEARCH GUIDANCE

PhD:	Completed: 01	Ongoing: 03
MTech:	Completed: 13	Ongoing: 02

LIST OF PUBLICATIONS

1. Chakraborty, S., Shaw, A., Banerjee, B., 2015, An axisymmetric model for Taylor impact test and estimation of metal plasticity, *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences*, 471 (2174), 20140556

2 Das, S., Jagan, S., Shaw, A., Pal, A., 2015, Determination of inter-yarn friction and its effect on ballistic response of para-aramid woven fabric under low velocity impact, *Composite Structures*, 120, 129 – 140.

3. Chakraborty, S., Shaw, A., 2015, Prognosis for ballistic sensitivity of pre-notch in metallic beam through mesh-less computation reflecting material damage, *International Journal of Solids and Structures*, 67 – 68, 294 – 301.

4. Shaw, A., Reid, S.R., Roy, D., Chakraborty, S., 2015, Beyond classical dynamic structural plasticity using mesh-free modelling techniques, *International Journal of Impact Engineering*, 75, 268 – 278.

5. Chakraborty, S., Shaw, A., 2014, Crack propagation in bi-material system via pseudo-spring Smoothed Particle Hydrodynamics, *International Journal of Computational Methods in Engineering Science and Mechanics*, 15, 294 – 301.

6. Chakraborty S, Shaw A, 2013, A pseudo-spring based fracture model for SPH simulation of impact dynamics, *International Journal of Impact Engineering*, 58, 84 – 95.

7. Shaw, A., 2012, Penetration of rigid objects into semi-infinite compressible solids, *Mechanics of Materials*, 50, 22 – 35.

8. Shaw, A., Roy, D., 2012, Stabilized SPH-based simulations of impact dynamics using acceleration-corrected artificial viscosity, *International Journal of Impact Engineering,* 48, 98 – 160.

9. Shaw, A., Roy, D., Reid, S.R., 2011, Optimised form of acceleration correction algorithm within SPH-based simulations of impact mechanics, *International Journal of Solids and Structures*, 48, 3484 – 3498.

10. Shaw, A., Reid, S. R., 2009, Heuristic acceleration correction algorithm for use in SPH computations in impact mechanics, *Computer Methods in Applied Mechanics and Engineering*, 198, 3962 – 3974.

11. Shaw, A., Reid, S. R., 2009, Applications of SPH with the Acceleration Correction Algorithm in Structural Impact Computations, *Currect Science*, 97(8), 1177 – 1186.

12. Banerjee, B., Shaw, A., Roy, D., 2009, The theory of Cosserat points applied to the analyses of wrinkled and slack membranes *by Computational Mechanics*, 43(3), 415 – 429.

13. Shaw, A., Kaushik, K.N., Roy, D., 2009, Mesh-free Approximations via the Error Reproducing Kernel Method and Applications to Nonlinear Systems Developing Shocks, *International Journal of Nonlinear Mechanics*, 44(4), 417 – 431.

14. Shaw, A., Roy, D., 2007, Analyses of Wrinkled and Slack Membranes through an Error Reproducing Mesh-free Method, *International Journal of Solids and Structures*, 44(11-12), 3939 – 39.

15. Shaw, A., Roy, D., 2007, A NURBS-based error reproducing kernel method with applications in solid mechanic, *Computational Mechanics*, 40(1), 127 – 148.

16. Shaw, A., Roy, D., Reid, S.R., Aleyaasin, M., 2007, A reproducing kernel collocation method applied to the nonlinear dynamics of pipe whip in a plane, *International Journal of Impact Engineering*, 34(10), 1637 – 1654.

17. Shaw, A., Roy, D., Banerjee, B., 2008, A NURBS-based Parametric Method Bridging Mesh-free and Finite Element Formulations, *Computer Modeling in Engineering & Sciences*, 26 (1), 31 – 60.

18. Shaw, A., Roy, D., 2007, A novel form of reproducing kernel interpolation method with applications to nonlinear mechanics, *Computer Modeling in Engineering and Sciences*, 19(1), 69 – 98.

19. Shaw, A., Roy, D., 2008, NURBS-based Parametric Mesh-free Methods, *Comput. Methods Appl. Mech. Engrg*, 197(17 -18), 1541 – 1567.

20. Shaw, A., Bendapudi, S., Roy, D., 2007, A Kriging-based Error Reproducing and interpolating Kernel Method for Improved Mesh-free Approximations, *International Journal for numerical methods in engineering*, 73(10),1434 – 1467.

21. Shaw, A., Roy, D., 2007, Improved Procedures for Static and Dynamic Analyses of Wrinkled Membranes, *Journal of Applied Mechanics (ASME)*, 74(3), 590 – 594.

22. Shaw, A., Roy, D., 2005, A novel form of interpolating and reproducing kernel method and numerical studies on the nonlinear dynamics of pipe whip, *Journal of Structural Engineering*, 32, 233 – 238.

AWARDS/ RECOGNITATION

Young Faculty Award 2012, Indian Institute of Technology Kharagpur

SPONSORED PROJECT

Role	Name of Sponsoring agency	Title of project/ facilities	Total amount (Rupees in Lakh)	Total period of support with dates from to
PI	IIT Kharagpur	Characterization of Ballistic Performance of Ceramic-Metal Composite Armour against Armour Piercing (AP) Projectile	5.0	Completed
Co-PI	NRB	Underwater non-contact explosive response of marine grade sandwich composite panels	72.48	Completed
Co-PI	DRDO	An integrated computational & experimental approach to Structural Design for Ballistic Impacts & Blast	155.58	06/06/14 – 06/06/2017