Name	**Dr. SANJEEV SAXENA**
Sex	Male
Designation	Scientist Gr. IV (4)
Main Area of Specialization	Engineering Science
Sub area of Specialization	Fatigue and Fracture Mechanics, FEM analysis, Failure analysis, Assessment of Ductile material & Component behaviour

Educational Attainments

Qualification Title	Specialization	Year	Division	University	Additional Information
B.E	Civil	1996	First	Barkatullah University, Bhopal	77.8% Rank in University
G.A.T.E.	Civil	1998	Cleared	----------	92.69%ile
M. Tech.	Structural Engg	2000	First	I.T. Banaras Hindu University, Varanasi	87% Gold Medal
PhD	Civil	Jan., 2011	Awarded	R.G.P.V., Bhopal	

Fellowships/Memberships of Professional Societies

Name of Society	Year
Indian Concrete Institute	Life Member

AWARDS / RECOGNITIONS

S. No.	Details of Award / Recognition
1	Certificate of merit given by institution of India, for one Technical Paper
2	Dr. M. Ramaiah Prize from SERC, Chennai, for the best technical paper
3	Young Scientist Seminar Award from CLRI, CSIR, Chennai
4	Gold Medal from IT- Banaras Hindu University (BHU), Varanasi, U.P.
5	Certificate of appreciation, “Award for best CSIR network Project”.
6	Certificate of appreciation, “Award for best Initiated Project”.
7	Certificate of Merit from the university for getting higher rank in B.E.
8	Certificate of Merit from Government of M.P. for getting higher rank in 12 board (10+2) exams.
9	G.A.T.E. Scholarship
10	One Chapter: “Fatigue Analysis of Structures” in advanced course proceeding book published by Allied publisher, Chennai, 2003.

PUBLICATIONS:

JOURNALS

1	**Sanjeev Saxena,** N. Ramakrishnan and J S Chouhan, “Numerical determination of stretch zone width (SZW) using tensile test data. Wiley Journal, Fatigue & fracture of Engineering Materials & Structures. Vol. 34, Issue 3, Pages 205-214, March, 2011 **(Impact Factor = 0.934).**
2	**Sanjeev Saxena**, N. Ramakrishnan and J S Chouhan, “Establishing methodology to predict fracture behaviour of piping components by numerically predicting specimen fracture data using tensile specimen test”, Engineering Fracture Mechanics, Volume 77, Issue 7, May 2010, Pages 1058-1072. **(Impact Factor = 1.713).**
3	**Sanjeev Saxena,** N. Ramakrishnan and J S Chouhan, “Establishing methodology to predict crack initiation load in through-wall cracked components using tensile specimen test data”, International Journal of Pressure Vessels and Piping, Volume 87, Issue 12, December 2010, Pages 737-745. **(Impact Factor = 0.862**).
4	**Sanjeev Saxena,** N. Ramakrishnan and J S Chouhan, **“**Coupled phenomenological and fracture mechanics approach to assess the fracture behaviour of TWC piping component”, Nuclear Engineering and Design, Volume 240, Issue 4, April 2010, Pages

	679-687. **(Impact Factor = 0.874**).
5	**Sanjeev Saxena,** N. Ramakrishnan and B K Dutta, "Determination of stretch zone width using FEM", Engineering Fracture Mechanics, Vol. 76, Issue 7, 2009, pp 911-920**. (Impact Factor = 1.390).**
6	**Sanjeev Saxena**, N. Ramakrishnan and J. S. Chouhan, "Fatigue life prediction analysis of surface cracked straight pipes", Trans. of the Indian Instt. of Metal. Vol. 62, Issue 3, June 2009.pp 191-195 **(Impact Factor = 0.215).**
7	**Sanjeev Saxena,** N Ramakrishnan and J S Chouhan**, "**Assessing fracture behaviour of circumferentially TWC elbows subjected to closing and opening moment", Elsevier Jr , Nuclear Engineering and Design, Volume 239 , Issue 1, January 2009, Pages 9-15 **(Impact Factor = 0.874).**
8	**Sanjeev Saxena** and N. Ramakrishnan**,** "An improved method for numerical determination of SZW using FEM", Nuclear Engineering and Design. Vol. 239, Issue 7, 2009, pp 1207-1211**(Impact Factor = 0.874).**
9	**Sanjeev Saxena** and N. Ramakrishnan, "Characterizing crack initiation load in circumferentially through-wall cracked elbows under bending load", International Journal of Pressure Vessels and Piping 84 (8), 2007, 493–501 **(Impact Factor = 0.830).**
10	**Sanjeev Saxena** and N. Ramakrishnan, "A comparison of Micro, Meso and Macro scale FEM analysis of ductile fracture in a CT specimen (Mode I)", Computational Materials Science, Vol. 39, Issue-1, March 2007, Pages 1-7. **(Impact Factor = 1.424).**
11	**Sanjeev Saxena** and D.S. Ramachandra Murthy, "On the accuracy of ductile fracture assessment of through-wall cracked pipes", Engineering Structures, Vol. 29, Issue 5, 2007, Pages 789-801. **(Impact Factor = 0.813).**
12	**Sanjeev Saxena**, N. Ramakrishnan and J S Chouhan, "Prediction of smooth elbow behaviour using finite element method", Trans. of the Indian Instt. of Met. 2007, Vol. 60 No 6 pp 553-558**(Impact Factor = 0.215).**
13	**Sanjeev Saxena** and N. Ramakrishnan, "Characterization of plastic collapse load determination in circumferentially through-wall cracked elbows", Nuclear Engineering and Design, Volume 236, Issue 17, 2006, Pages 1739-1747. **(Impact Factor = 0.440).**
14	**Sanjeev Saxena** and D.S. Ramachandra Murthy, "Elastic-plastic fracture mechanics based prediction of fracture instability in circumferentially through-wall cracked pipes in bending", Trans. of the Indian Instt. of Met. Vol. 58, Nos. 2-3, April-June 2005, pp. 461-466. **(Impact Factor = 0.215).**
15	**Sanjeev Saxena** and D.S. Ramachandra Murthy, "Elastic-plastic fracture mechanics based prediction of crack initiation load in through-wall cracked pipes", Elsevier Jr., Engineering Structures, 2004, 26, pp 1165-1172. **(Impact Factor = 0.809**).
16	**Sanjeev Saxena** and N. Ramakrishnan, "Assessing the accuracy of fatigue life in surface cracked straight pipes", Wiley and Blackwel, Fatigue fracture of Engg materials and Structures. 2011, 34, pp 1003-1011 **(Impact Factor = 0.934).**
17	**Sanjeev Saxena, "**Numerical evaluation of geometric independent stretch zone width value for assessing valid Jszw", Elsevier Jr, Nuclear Engg and Design, 2012, 252, pp 68-77. **(Impact Factor = 0.883**).
18	**Sanjeev Saxena,** Raghvendra Singh, Geeta Agnihotri, Numerical evaluation of variation in characteristic distance due to fracture specimen thickness and temperature, Computers, Materials and Continua, Tech Science Press, 2013, Vol. 1(1), pp 1-14. **(Impact Factor = 0.97**).
19	S. K. Panthi, **Sanjeev Saxena,** Numerical prediction of crack location in deep drawing processes, Computers, Materials and Continua, Tech Science Press, 2012, Vol. 32, pp 15-**(Impact Factor = 0.97**).
20	**Sanjeev Saxena** and A. K. Jha**, "**Improved evaluation of design parameters and

	critical activity for the design of artificial hip joint", Communicated to Computers, Materials and Continua (2013). **(Impact Factor = 0.97**).
21	**Sanjeev Saxena,** B. K. Dutta and G. Sasikala, Methodology for numerical assessment of SZW under mixed mode fracture, Cummunicated to Elsevier Jr, Engg Frac. Mech., 2013. **(Impact Factor= 1.713).**
22	**Sanjeev Saxena,** B. K. Dutta and G. Sasikala, Evaluating a valid fracture specimen geometry for predicting geometry independent SZWc and Jszw value in SA333 Gr. 6 carbon steel material, Cummunicated to Elsevier Jr, Engg Frac. Mech., 2013. **(Impact Factor= 1.713)**
23	Shrikrishna Dhakad, **Sanjeev Saxena** and Geeta Agnihotri, Life Prediction and crack propagation analysis for the Pipe weld Straight component (PWSC) of power plant, International Journal of Scientific Engineering and Technology, Vol.1(2), pp112-117, 2012
24	**Sanjeev Saxena** and D.S. Ramachandra Murthy, "Fracture mechanics prediction of limit load in circumferentially through-wall cracked pipes", Jr. of Inttn. of Engrs (India), 2006, Vol. 86, Jan. pp.182.
25	**Sanjeev Saxena** and D.S. Ramachandra Murthy, "Master curve approach for through-thickness crack length in plates with central surface notch", Jr. of Inttn. of Engrs (India), 2004, Vol. 85, May, pp 49-54.
26	P. K. Singh, **Sanjeev Saxena** and B.N Roy, "Behaviour of Brick Masonary infilled reinforced concrete frame subjected to static loading", Jr. of Inttn. of Engrs (India), 2001, Vol. 82, June, pp 23-29.
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1	**Sanjeev Saxena,** Dutta BK and Sasikala G, Evaluation of geometry independent SZWc value for Jszwc prediction, International conference, Transactions, SMiRT 21, 6-11 November, 2011, New Delhi, India.
2	**Sanjeev Saxe**na, Dushyant Singh Rajput, G. Sasikala, B.K. Dutta and Geeta Agnihotri, Numerical prediction of SZW variation for assessing valid fracture toughness in mod 9Cr1Mo steel, Int. Conf. smart Technologies for mechanical engineering (STME-2013), 25-26, Oct., 2013.
3	**Sanjeev Saxena**, A.K. Jha, Meraj Ahmed, Sanjay Panthi, Harish Rao and Anil K.Gupta, "Performance Evaluation of Artificial Hip Joint Using FEM, International Conference on Biomaterials and Implants: Prospects and Possibilities in the New Millennium (BIO 2011), July, 21-23, 2011, CGCRI, Kolkata.
4	**Sanjeev Saxena**, "Prediction of SZWc based initiation fracture toughness for ductile material using tensile test data", All India Seminar on " Life cycle analysis, Measurement & Condition monitoring, 25-26 May, 2009, pp 139-144.
5	Srikant Dakad, **Sanjeev Saxena** and Geeta Agnihotri, "Fatigue crack growth analysis of power plant component using LEFM approach", All India Seminar on " Life cycle analysis, Measurement & Condition monitoring, 25-26 May, 2009, pp 89-93.
6	Sangeeta Shakrawar**, Sanjeev Saxena** and Geeta Agnihotri, "FEM based prediction of fracture response of cracked elbow subjected to plastic deformation under bending", All India Seminar on " Life cycle analysis, Measurement & Condition monitoring, 25-26 May, 2009, pp 89-93.
7	Abhay gupta, **Sanjeev Saxena** and Geeta Agnihotri, "Prediction of fracture behaviour of through-wall cracked pipes using J-estimation schemes", All India Seminar on " Life cycle analysis, Measurement & Condition monitoring, 25-26 May, 2009, pp 133-138.
8	Rajni Gurjar, **Sanjeev Saxena** and K. Tripathi, "Computer aided evaluation of fatigue failure of power plant component", All India Seminar on " Life cycle analysis, Measurement & Condition monitoring, 25-26 May, 2009, pp 46-51.
9	**Sanjeev Saxena,** N. Ramakrishnan and J. S. Chouhan, "EPFM based predictions of

	important experimental results in circumferentially TWC elbows", CF-5 Creep, fatigue and creep-fatigue interaction, IGCAR, Kalpakkam, 2008.
10	**Sanjeev Saxena**, Ductile fracture assessment at specimen and component level using finite element method, Bhartiya Vighyan Sammelan, Nov. 23-25, 2007, Bhopal.
11	**Sanjeev Saxena**, N. Ramakrishnan, BK Dutta and P Rama Rao,"Large deformation FEM analysis of ductile fracture", ICCES-07, 3-8, Jan. 2007, Miami, Florida.
12	**Sanjeev Saxena** and N. Ramakrishnan, "FEM characterization of ductile fracture using various methods", 3rd Indo-German Seminar on "Advances in Structural Integrity & Safety (ASIS-2005), BARC, Mumbai, Nov. 15-17, 2005.
13	**Sanjeev Saxena,** N. Ramakrishnan, **"**FEM characterization of Ductile fracture Using various Methods", IWCMM 15, 15th International Workshop on Computational Mechanics of Material, 2005, pp. L21 Germany.
14	**Sanjeev Saxena** and N. Ramakrishnan**, "**Predicting behaviour of circumferentially through-wall cracked elbows under bending", ICCES-05, International conference on computational and experimental engineering and sciences, Dec. 1-6, 2005, IIT- Madras, India
15	**Sanjeev Saxena,** N Ramakrishnan and AH Yegneshwaran, "Characterization of ductile fracture", International symposium on frontiers in design of materials (FDM 2005), IIT-Madras, India.
16	**Sanjeev Saxena** and D.S. Ramachandra Murthy, "Prediction of crack initiation load in through-wall cracked pipes based on elastic-plastic fracture mechanics", Proc. SEC 2003, an international meet, IIT, Kharagpur, Dec. 12-14, pp 416-431, 2003.
17	**Sanjeev Saxena** and D.S. Ramachandra Murthy, "Elastic-plastic fracture mechanics based prediction of fracture instability in circumferentially through-wall cracked pipes in bending", 4th conf. On "Creep, fatigue and creep-fatigue interaction", Oct. 8-10, 2003, IGCAR, Kalpakkam.
18	**Sanjeev Saxena**, S. Seetharaman, D.S. Ramachandra Murthy, "Use of finite element method in the life prediction of piping component", All India Seminar, Inttn of Engrs. (India), TN center, 2002.
GUIDANCE:	
1	M.Tech. : Twelve
REVIEWER OF INTERNATIONAL (SCI) JOURNALS	
1	Engineering Fracture Mechanics
2	Nuclear Engineering and Design
3	IEEE Journal