

## Publications:

### A) International Journals:

SL. No.	Title of the Paper	Name of the Journal with Vol. No. pp	Year	Name of Author(s)*
1	Asset Risk Criticality Analysis of Process Operations Using Fuzzy Logic	<i>Journal of Industrial Mechanics</i> Vol. 5, Issue 1	2020 Matjournals	Muhammed Kamrul Islam <sup>1</sup> , Syed Masrur Ahmmad , Sajal Chandra Banik, Nurun Nahar Begum
2	Design and Experimental Analysis of a Lens Based Solar Collector	<i>Journal of Thermal Energy Systems</i> Vol.5, Issue.1	2020 Matjournals	Syed Masrur Ahmmad, Puja Chowdhury, Sajal Chandra Banik
3	Experimental Investigation on Active Personal Space for a Human-Robot Working Cell	<i>Robotic Research Journal</i> Vol. 2, No.1	2019 CanSRG Canada	Sajal Chandra Banik, Eshita Lasker, Himanshu Kumar and Muhammed Kamrul Islam
4	Multi-Criteria Decision Making Tool for the Safety of Bangladeshi Industries Using Fuzzy Logic	<i>International Journal of Production Engineering (IJPE)</i> , Vol. 4, Issue 1	2018 JournalsPub India	Muhammed Kamrul Islam, Sajal Chandra Banik Nazmus Sakib Nurun Nahar Begum
5	Study of Construction and Analysis of a Vehicle Using Solar Energy with Solar Tracking System	<i>International Journal Of Novel Research on In Electrical and Mechanical Engg.</i>	Vol. 1, Issue 1 Dec, 2014, India	M. A. Amin, N. B. Chowdhury, F. Rabby, <b>S. C. Banik</b> , and Z Islam
6	Design and Testing of a High Frequency Air-cored Resonance Transformer	<i>International Journal of Mechatronics and Manufacturing Systems (IJMMS)</i> , Vol. 6, No. 1	Inderscience Publisher, 2013, UK	Ashoke Kumar Sen Gupta, <b>Sajal Chandra Banik</b> , Awadhesh Kumar Pandit and Md. Mazharul Islam
7	Development of a Prototype CNC Router	<i>International Journal of Mechanical Engineering (IJME)</i> , Vol. 2, Issue. 2, pp. 63-68	International Academy of Science, Engineering and Technology (IASET), May, 2013	M. S. Rabbi, <b>S. C. Banik</b> and M. T. Islam
8	A Software Based Electric Actuator Control System with Robotic Arm-A Learning Aid for Undergraduate Students	<i>International Journal of General Engineering and Technology (IJGET)</i> , Vol. 2, Issue. 1, pp. 15-24	International Academy of Science, Engineering and Technology (IASET), February, 2013	Mohammad Saidur Rahman and <b>Sajal Chandra Banik</b>
9	Determination of Active Personal Space Based on Emotion when Interacting with a Service Robot	<i>International Journal of Advanced Robotic Systems</i> , Vol. 10. 167:2013	INTECH, Jan 2013, USA	<b>Sajal Chandra Banik</b> , Ashoke Kumar Sen Gupta, M. K. Habib, and R. N. Mousumi
10	Design of a Vehicle Suspension System with Negative Stiffness System	<i>IST Transaction of Mechanical Systems-Theory and Applications</i> , Vol. 1. No.1(2), pp 1-7	2010, Canada	M. Arafat Rahman, Park Sung Tae and <b>Sajal Chandra Banik</b>

11	A Computational Model of Emotion Through the Perspective of Benevolent Agents for a Cooperative Task	<i>International Journal of Artificial Life and Robotics</i> , Vol. 13 , no. 1, pp. 162-166	Dec, 2008, Springer, Japan	<b>Sajal Chandra Banik</b> , Keigo Watanabe and Kiyotaka Izumi
12	Generation of Cooperative Behavior of Robots Using a Fuzzy-Markov Emotional Model	<i>International Journal of System ,Signal, Control and Engineering Application (IJSSCEA)</i> , vol.1(1), pp.101- 109	2008, Pakistan	<b>Sajal Chandra Banik</b> , Keigo Watanabe and Kiyotaka Izumi
13	Intelligent Behavior Generation of Benevolent Agents with a Stochastic Model of Emotion	Journal of LNCS, Part II LNCS 4985, pp.147-156	2008, Springer-Verlag, Berlin Heidelberg	<b>Sajal Chandra Banik</b> , Keigo Watanabe and Kiyotaka Izumi
14	Improvement of Group Performance of Job Distributed Mobile Robots by Emotionally Biased Control System	<i>International Journal of Artificial Life and Robotics</i> , Vol. 12, No. 1-2, pp. 245-249	2008, Springer, Japan	<b>Sajal Chandra Banik</b> , Keigo Watanabe and Kiyotaka Izumi

B) National Journals:

SL. No.	Title of the Paper	Name of the Journal with Vol. No. pp	Year and Country of Publication	Name of Author(s)*
1.	Development of a Position Monitoring System	<i>Mechanical Engineering Research Journal, Vol. 8, 2012</i>	2012, Bangladesh	Md. Kamrul Hasan, <b>S. C. Banik</b> and M. S. Rabbi
2.	Development of a Smart Home by Voice Control	<i>Mechanical Engineering Research Journal, Vol. 8, 2012</i>	2012, Bangladesh	K. T. Rasul, M. S. Rabbi, <b>S. C. Banik</b> and S. M. Ahammad
3.	Performance of Heat Pipe for Different Working Fluids and Fill Ratios	<i>Journal of Mechanical Engineering Vol. ME 41 No. 2, Dec 2010, Trans of the Mech.Eng.Div.,Eng. Div. IEB</i>	2010, Bangladesh	K. T. Rasul, M. S. Rabbi, <b>S. C. Banik</b> and S. M. Ahammad
4.	Home Appliances Control System by Cell Phone	<i>Mech. Engg. Research Journal, ISSN 1990-5491 Vol. 7, pp. 77-87</i>	2010, Bangladesh	M. M. K. Bhuiya, M. A. Islam, <b>S. C. Banik</b> , A. Gaffer, M. R. T. Hossain and A. S. M. Savem
5.	Design and Fabrication of Geographical Direction Sensible Robot	<i>Mechanical Engg Research Journal, ISSN 1990-5491, vol. 7, pp.63-67</i>	2010, Bangladesh	M. Islam, R. I. Rousseau, <b>S. C. Banik</b> and R. Karim
6.	Fuzzy Control of a One Link SMA Manipulator	<i>Mechanical Engineering Research Journal, ISSN 1990-5491, vol. 6, pp.63-67</i>	2008, Bangladesh	S. M. M. Rahman, <b>S. C. Banik</b> , S. M. H. Kabir and K. K. Ahn
7.	Parametric Study and Uniaxial Simulation of an Elasto-Plastic Continuum Model	<i>Mechanical Engineering Research Journal, ISSN 1990-5491, vol. 6, pp.08-15</i>	2008, Bangladesh	S. M. H. Kabir, S. M. M. Rahman and <b>S. C. Banik</b>

8.	Model Based Analysis of a CVT Adjustment Drive	<i>Mechanical Engg Research Journal</i> , ISSN 1990-5491, vol. 6, pp. 16-26	2008, Bangladesh	<b>S. C. Banik</b> , S. M. M. Rahman and S. M. H. Kabir
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C) Proceedings of International Conference/Seminar/Workshop:

SL. No.	Title of the Paper	Name of the Journal with Vol. No. pp	Year and Country of Publication	Name of Author(s)*
1	A study of municipal solid waste potential energy and reduction of greenhouse gas emissions in Dhaka	<i>Proc. Of the 5<sup>th</sup> International Conference on Developments in Renewable Energy Technology (ICDRET)</i> , PI-96, 29-31 March, 2018	2018 Kathmandu Nepal	Zannatul Fardous, Riazul Islam, Kazi Fatima Sharif and <b>Sajal Chandra Banik</b>
2.	Development of an online based driver recruitment system	<i>Proc. Of the 4<sup>th</sup> International Conference on Mechanical Engineering and Renewable Energy (ICMERE)</i> , PI-103, 18-20 Dec, 2017	2017 Chittagong Bangladesh	Md Rayhan Hasnat, Md. Nesar Ali and <b>Sajal Chandra Banik</b>
3.	Design and fabrication of multi-purpose mechanical machine	<i>Proc. Of the 4<sup>th</sup> International Conference on Mechanical Engineering and Renewable Energy (ICMERE)</i> , PI-163, 18-20 Dec, 2017	2017 Chittagong Bangladesh	Saikat Dey, <b>Sajal Chandra Banik</b> and Swapnil Das
4.	Implementation of relaxation concept using water jet	<i>Proc. Of the International Conference on Mechanical, Industrial and Energy Engineering (ICMIEE-2016)</i> , PI-160169, 26-27 Dec, 2016	2016 Khulna Bangladesh	Farida Ahmed Koly. Md. Sadman Akand and <b>Sajal Chandra Banik</b>
5.	A combination system model of neural network for reducing nonlinear problem of a DC servo motor system	<i>Proc. Of the 3<sup>rd</sup> International Conference on Mechanical Engineering and Renewable Energy (ICMERE)</i> , PI-010, 26-29 Nov, 2015	2015 Chittagong Bangladesh	Puja Chowdhury, Debdatta Das and <b>S C Banik</b>
6.	Design and fabrication of a robotic arm for interior wall painting	<i>Proc. Of the 3<sup>rd</sup> International Conference on Mechanical Engineering and Renewable Energy (ICMERE)</i> , PI-097, 26-29 Nov, 2015	2015 Chittagong Bangladesh	Nwomey Subayer, Prantik Roy Chowdhury, Anik Samadder and <b>S C Banik</b>
7.	Energy saving model design for swing hydraulic excavator	<i>Proc. Of the 3<sup>rd</sup> International Conference on Mechanical Engineering and Renewable Energy (ICMERE)</i> , PI-011, 26-29 Nov, 2015	2015 Chittagong Bangladesh	Puja Chowdhury, Debdatta Das and <b>S C Banik</b>
8.	Development of a modern GPS tracking system	<i>Proc. Of the 2<sup>nd</sup> International Conference on Mechanical Engineering and Renewable Energy (ICMERE)</i> , PI-062, 01-03 May, 2014	2014, Chittagong Bangladesh	Shuva Das, <b>Sajal Chandra Banik</b> , Md. Ruhul Amin and Ahamed Nasif Hossain Aoyon

9.	Bi-Pedal walking robot	<i>Proc. Of the 2<sup>nd</sup> International Conference on Mechanical Engineering and Renewable Energy (ICMERE), PI-068, 01-03 May, 2014</i>	2014, Chittagong Bangladesh	Razaur Rahman Arzu, Mahmudul Hasan Russel, Kazi Afzalur Rahman, <b>Sajal Chandra Banik</b> and Md. Tazul Islam
10.	Development of an automatic color sorting machine on belt conveyor	<i>Proc. Of the 2<sup>nd</sup> International Conference on Mechanical Engineering and Renewable Energy (ICMERE), PI-172, 01-03 May, 2014</i>	2014, Chittagong Bangladesh	Sottom Halder, Md. Kamrul Islam, Mahmood Sabria Chowdhury and <b>Sajal Chandra Banik</b>
11.	Development of an Exploring robot to solve mazes	<i>Proc. Of the 2<sup>nd</sup> International Conference on Mechanical Engineering and Renewable Energy (ICMERE), PI-184, 01-03 May, 2014</i>	2014, Chittagong Bangladesh	Mahmood Sabria Chowdhury, Md. Kamrul Islam, Sottom Halder and <b>Sajal Chandra Banik</b>
12.	Design and fabrication of a model of remote controlled Hovercraft	<i>Proc. Of the 2<sup>nd</sup> International Conference on Mechanical Engineering and Renewable Energy (ICMERE), PI-298, 01-03 May, 2014</i>	2014, Chittagong Bangladesh	S Chowdhury, M. S. Rabbi and <b>S. C. Banik</b>
13.	Terminator: A Lunar Type Excavator Robot	<i>4<sup>th</sup> Annual Lunabotics Mining Competition, Seminar on System Engineering Papers, May 21-24, 2013</i>	2013, Kennedy Space Center, NASA, Florida, USA	<b>Sajal Chandra Banik</b> , Rini Eshan Khushboo, Shaikh Ahmed, Rifat Mahmud and Nahin Bahar Chowdhury
14.	Development of a GSM controlled and Real Time Obstacle Avoiding Mobile Robot	<i>Proc. of the 1<sup>st</sup> International Conference on Mech. Engg and Renewable Energy(ICMERE)</i>	2011, Chittagong, Bangladesh	Humayun Kabir, <b>S. C. Banik</b> , Rezaur Rahman and Himadri Deb
15.	Design and Fabrication of an Automated Liquid Filling Machine	<i>Proc. of the 1<sup>st</sup> Int. Conf. on Mech. Engg. and Renewable Energy</i>	2011, Chittagong, Bangladesh	Md. Nur-E-Alam Al Nasim and <b>S. C. Banik</b>
16.	Development of a Model of Water Jet Cutting Machine with Automatic Routing System	<i>Proc. of the 13<sup>th</sup> Asian Congress of Fluid Mechanics, , pp.675-678</i>	2010 Dhaka Bangladesh,	M. T. Islam, <b>S. C. Banik</b> and S. A. Nahian
17.	Behavior Generation in Robots by Emotional Motivation	<i>Proc. of IEEE Int. Symp. on Industrial Electronics (ISIE), pp. 455-460</i>	2009 Seoul, Korea	Kiyotaka Izumi, <b>Sajal Chandra Banik</b> and Keigo Watanabe
18.	An Emotion-Based Task Sharing Approach for a Cooperative Multiagent Robotic System	<i>IEEE International Conference on Mechatronics and Automation (ICMA)</i>	2008, Takamatsu, Kagawa, Japan	<b>Sajal Chandra Banik</b> , Keigo Watanabe, Maki K. Habib and Kiyotaka Izumi
19.	A Computational Model of Emotion Through the Perspective of Benevolent agent for a cooperative task	<i>13<sup>th</sup> Int. Symposium on Artificial Life and Robotics (AROB), pp. 771-774</i>	2008 B-Con Plaza, Beppu, Oita, JAPAN	<b>Sajal Chandra Banik</b> , Keigo Watanabe and Kiyotaka Izumi
20.	A Model Based Analysis of Temperature Behavior of a Manufacturing Cell	<i>Proc. of the Int. Conference on Mechanical Engineering 2007 (ICME2007), ICME07-TH-16</i>	Dec. 29-31, 2007, Dhaka, Bangladesh	<b>S. C. Banik</b> and A. K. Mazumder
21.	Task Allocation with a Cooperative Plan for An Emotionally Intelligent System of Multi-robots	<i>Proc. of SICE Annual Conference, pp. 1004-1010</i>	Kagawa University, Japan, Sept 17- 20, 2007	<b>Sajal Chandra Banik</b> , Keigo Watanabe and Kiyotaka Izumi

22.	Behavior Generation Through Interaction in an Emotionally Intelligent Robots system	<i>Proc. of IEEE International Conference on Industrial and Information System (ICIIS'07)</i> , pp. 517-522	University of Peradeniya, Sri Lanka, Aug 9-11, 2007	<b>Sajal Chandra Banik</b> , Keigo Watanabe and Kiyotaka Izumi
23.	Intelligent Behavior Generation of Job Distributed Mobile Robots Through Emotional Interaction	<i>Proc of 13<sup>th</sup> International Conference on Advanced Robotics</i> , pp.1215-1219	Aug 21-24, 2007, Jeju, Korea	<b>Sajal Chandra Banik</b> , Keigo Watanabe and Kiyotaka Izumi
24.	Improvement of Group Performance of Job Distributed Mobile Robots by Emotionally Biased Control system	<i>Proc. Of International Symposium on Artificial Life and Robotics</i> , pp. 756-759	Beppu, Oita, JAPAN, January 25- 27, 2007	<b>Sajal Chandra Banik</b> , Keigo Watanabe and Kiyotaka Izumi

D) Proceedings of National Conference/Seminar/Workshop:

SL. No.	Title of the Paper	Name of the Journal with Vol. No. pp	Year and Country of Publication	Name of Author(s)*
1.	Development of a Voice Controlled Robotic Arm	<i>Proc. of the Conference of Engineering Research, Innovation and Education (CERIE 2011)</i>	Sylhet, Bangladesh, 11-13 January, 2011.	Humayun Kabir, Akkas U. Haque, <b>S. C. Banik</b> and M. T. Islam
2.	Design and Fabrication of a Model of Voice Controlled Powder Filling Machine	<i>Proc. of the 13<sup>th</sup> Annual Paper Meet</i>	Dhaka, Bangladesh, 25 September, 2010	M. T. Islam, <b>S. C. Banik</b> and S. A. Nahian
3.	Study of flow impinging on a flat surface with an Angle of incidence	<i>Proc. of the Sixth Annual Paper Meet</i> , Paper No.39, pp. 297- 304	The Institute of Engineers, Bangladesh, Mechanical Engineering Division, Jan. 27-29, 2000	<b>S. C. Banik</b> , A. K. Mozumder, and M. A. Azim

E) Publication of Books/Book Chapters

Name of Book	Publishing Co.	Year of Publication	Chapter Title	Author(s)
Handbook of Research on Synthetic Emotions and Sociable Robotics: New Applications in Affective Computing and Artificial Intelligence	Jordi Vallverdù & David Casacuberta (eds.), IGI Global, USA	2009	<b>Chapter IV</b> Title: Multi-robot Team Work with Benevolent Characters: The Roles of Emotions	<b>Sajal Chandra Banik</b> , Keigo Watanabe, Maki K. Habib, and Kiyotaka Izumi
Sensors: Advancements in Modeling, Design Issues, Fabrication and Practical Applications	S.C. Mukhopadhyay & R. Y. M. Hu Springer –Verlag Berlin Heidelberg, Germany	2008	Affection Based Multi-robot Team Work	<b>Sajal Chandra Banik</b> , Keigo Watanabe, Maki K. Habib and Kiyotaka Izumi