RESUME

NAME: DR SUBRATA KARMAKAR

DESIGNATION: Professor & Head

CONTACTS:

1. **OFFICIAL ADDRESS FOR CORRESPONDENCE:**
   Department of Farm Machinery and Power,
   Faculty of Agricultural Engineering,
   BCKV, Mohanpur, (W. B.) 741 252

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   Alternative: skarmakar.bckv@gmail.com
4. **ORCID ID:** 0000-0002-9604-8935
5. **GOOGLE SCHOLAR PROFILE:** j3Ag2yYAAAAJ
6. **RESEARCHGATE PROFILE:** Subrata-Karmakar-8
7. **DATE OF BIRTH: 01/02/1973**
8. **DATE OF JOINING TO THE UNIVERSITY:** 29/06/1998

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9. ACADEMIC PROFILE:

LEVEL	NAME OF THE DEGREE WITH DISCIPLINE/ DEPARTMENT	INSTITUTE	YEAR OF PASSING
DOCTORAL	Ph.D. (Agriculture & Biosystem Engineering)	University of Saskatchewan, Canada	2006
MASTER'S	M. Tech. (Farm Machinery & Power)	IIT Kharagpur	1998
BACHELOR'S	B. E. (Agricultural Engineering)	Rajasthan Agricultural University, Udaipur	1996

10. EMPLOYMENT HISTORY: (Starting from present position)

POSITION	ORGANIZATION	PERIOD	
		From (Date)	To (Date)
Professor	BCKV	29.06.2014	Continuing
Associate Professor	BCKV	29.06.2011	28.06.2014
Reader	BCKV	29.06.2008	28.06.2011
Sr. Lecturer	BCKV	29.06.2004	28.06.2008
Lecturer	BCKV	29.06.1998	28.06.2004

11. ADMINISTRATIVE POST(S)/ RESPONSIBILIY(IES) (IF ANY)

SL. NO.	NAME OF THE POST(S)/ RESPONSIBILITY(IES)	PERIOD	
		From (Date)	To (Date)
1	**Head** of the Department, Farm Machinery & Power, BCKV	June, 2022	Continuing
2	**Head** of the Department, Farm Machinery & Power, BCKV	June, 2014	June, 2018

12. AREA OF RESEARCH :

- Soil dynamics in tillage and traction;
- Mechanization in Conservation Agriculture for small and marginal holdings;
- Numerical modelling (CFD & DEM)
- Decision support system (DSS)

13. COURSES ASSOCIATED WITH:

LEVEL	COURSE NO.	COURSE TITLE	CREDIT
UNDERGRADUATE	AE-111	Introduction to Agricultural Engineering	2+1
	AEG-210	Farm Machinery & Power	1+1
	FMP-242	Auto Cad Applications	0+2
	FMP-353	Machine Design	2+0
	FMP-361	Tractor and Farm Machinery operations and Maintenance	0+2
	FMP-481	Mechanics of Tillage & Traction	2+1
POST GRADUATE	FMPE-501	Soil Dynamics in Tillage & Traction	2+1
	FMPE-502	Testing and Evaluation of Tractor & Farm Machinery	2+1
	FMPE-503	Ergonomics and Safety in Farm Operations	2+1
Ph.D.	FMPE-602	Advance in Machinery for Precision Agriculture	2+1
	FMPE-612	Farm Machinery Management & System Engineering	2+1
	FMPE-615	Computer Aided Design for Farm Machinery	2+1

14. NUMBER OF STUDENTS SUPERVISED:

Master's: 15 Doctoral: 7

15. PROJECT ACTIVITIES

SL. NO.	TITLE OF THE PROJECT	FUNDING AGENCY	ONGOING/ COMPLETED	PI/ Co-PI
1	Development of a Mechanized Modern Farm for Promotion,	RKVY	Completed	PI

	Development and Dissemination of Improved Technologies			
2	Centre of Advanced Agricultural Science and Technology on Conservation Agriculture (CAAST	ICAR-NAHEP (World Bank)	Completed	Co-PI
3	Development of integrated model for potato based cropping system with Mechanization and Agro-processing	RKVY	Completed	Co-PI
4	Training to Agricultural Officers on Farm Mechanization	RKVY	Completed	PI

16. CAPACITY BUILDING/FACULTY DEVELOPMENT PROGRAMME ORGANIZED

SL. NO.	NAME OF THE PROGRAMME	DURATION	PLACE	ROLE
1	Officers training on Farm Mechanization	One week (2 sets)	Mohanpur	Organising Secretary
2	Promotion and Dissemination of Improved Technologies of Farm Mechanization	One week	Mohanpur	Coordinator

17. PATENTS/ HONOURS/ AWARDS/ RECOGNITION:

- Fellow, Institution of Engineers (India), 2015.
- University Publications Fund Award, University of Saskatchewan, Canada 2009.
- Appointment of Sr. Lecturer of Agricultural Engineering, Department of Mechanical Engineering, St. Augustine Campus, University of West Indies, Trinidad and Tobago, 2008
- Visiting Scientist Fellowship by Royal Society of UK, nominated by Cranfield University, UK 2006.
- Australian Post-Doctoral Fellowship Industry (APDI), Univ. of South Australia, Adelaide, 2005-2006.
- President's Travel Award, University of Saskatchewan, 2005 ASAE International Conference at Florida, USA.
- Alumni Travel Award, University of Saskatchewan for 2004 ASAE International Conference, Ottawa, Canada.

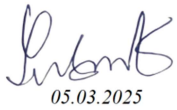
18. PUBLICATIONS

A. BOOKS

1. Modelling of Soil-Tool Interaction in Tillage, 2008: ISBN: 978-81-7895-349-6. Transworld Research Network
2. *Krishi Jontropatir Byabohar O Rakshanabekshan* 2018- ISBN- 978-81-935301-8-4

B. RESEARCH PAPERS (Best 10)

1. Bhunia, S., **S. Karmakar**, S. Bhattacharjee, K. Roy, S. Kanthal, M. Pramanick, A. Baishya, B. Mandal. **2021**. Optimization of energy consumption using data envelopment analysis (DEA) in rice-wheat-green gram cropping system under conservation tillage practices, **Energy**, 236, 121499.
2. Bartzanas, T., M. Kacira, H. Zhu, **S. Karmakar**, E. Tamimi, N. Katsoulas, In Bok Lee, C. Kittas. (2013). Computational fluid dynamics applications to improve crop production systems. **Computers and Electronics in Agriculture**, 93: 151–167.
3. Karmakar, A., **S. Karmakar** and S. Mukherjee. **2010**. Properties of various plants and animals feedstocks for biodiesel production. **Bioresour. Technol**., 101: 7201–7210.
4. **Karmakar, S**., M. Nketia, C. Laguë, J. Agnew and H. Landry. **2010.** Development of Expert System Modeling based Decision Support System for swine manure management. **Computers and Electronics in Agriculture**. 71: 88–95.
5. **Karmakar. S**., S. R. Ashrafizadeh and R. L. Kushwaha. **2009**. Experimental Validation of Computational Fluid Dynaics Modeling for Narrow Tillage Tool Draft. **Journal of Terramechanics** 46(6): 277-283.
6. **Karmakar. S.,** C. Laguë, J. Agnew and H. Landry. **2007**. An integrated decision support system (DSS) for the design, selection and operation of manure management. **Computers and Electronics in Agriculture.** 97: 407-414.
7. **Karmakar. S**. and R. L. Kushwaha. **2007**. Development and laboratory evaluation of soil visco-plastic parameters using a Soil Rheometer. **Journal of Terramechanics**. 44: 197-204.
8. **Karmakar. S**., R. L. Kushwaha and C. Laguë. **2007**. Numerical modeling using Computational Fluid Dynamics of Soil Stress and Pressure Distribution on a Flat Tillage Tool. **Biosystems Engineering**, 57: 190-201.
9. **Karmakar. S**. and R. L. Kushwaha. **2005**. Simulation of soil deformation around a tillage tool using computational fluid dynamics. **Transactions of the ASAE** 48(3): 923-932.
10. **Karmakar. S**., R. L. Kushwaha and D. S. Stilling. **2005**. Soil failure associated with crack propagation for an agricultural tillage tool. Soil & Tillage Research. **84(2): 119-126.**



05.03.2025

Signature with Date