### Dr. Machindra Nagnath Raut

ASSISTANT PROFESSOR, DEPARTMENT OF GEOLOGY BABURAO PATIL COLLEGE OF ARTS AND SCIENCE, ANGAR TALUKA – MOHOL DISTRICT – SOLAPUR PINE CODE 413214 Tal, INDIA

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### **Objective:**

To pursue scientific contributions that would further enrich my experience and creativity in the area of Hhydrogeological and Groundwater and their potential applications

### **Education:**

M.Sc.

Ph.D. Department of Geology ,
Solapur University, Solapur

Solapur, Maharashtra, India

Research supervisor: Prof. Dr. A.B. Narayanpethkar

Department of Geology, Solapur University, Solapur

Geology,

(June 2005- April 2007)

Solapur University, Solapur

B.Sc. Geology.

(June 2007- April 2010) Shivaji University Kolhapur

### **Employment and Professional Experience:**

November. 2012 Assistant Professor, (Regular) till date Department of Geology,

Baburao Patil College of Arts And Science, Angar Taluka - Mohol District -

Solapur.

### **Research activities:**

Students are encouraged to do research and try to explore new concepts in Geology at the college level. Students are participating in college level and university research Avishkar.

### **Avishkar Participation:**

Sr. No.	Name of Students	Topic	Year
1	Gurav Mohini Nanasaheb	Rain water harvesting using	2018-19
		lineament study	
2	Dalave Ajay Mahavir	Geomorphological study for ground	2019-20
		recharge	
3	Dalave Ajay Mahavir	Electric resistivity model	2020-21
		study for rainwater	

		harvesting in Deccan	
		basalt	
4		Demarcation of Feasible Sites for	2021-22
	Sule Rushikes	Rainwater Harvesting Using Study of	
		Storativity and Transmisivity in Sus	
		Basin	
5	Shubhangi Ghadage	Influence of Geomorphologic Aspects	2022-23
	_	on Groundwater Regime In Angar	
		Basin: A Case Study	

# Research paper published in journals:-

Sr. No.	Name of Paper	Name of Journal	ISSN/ISBN	Year of publication
1	Vadose Zone And Groundwater Table Studies In Dubdubi Basin Solapur District, Maharashtra, India.	Arahat Multidishiplanary international Education Research Journal	2278-5655	Sept. 2012
2	Laps Time For Rise And Fall In Groundwater Level And Groundwater Fluctuation Studies In Basaltic Terrain Of Solapur District, Maharashtra, India	Arahat Multidisciplinary international Education Research Journal	2278-5655	Sept. 2012
3	Modeling Studies for Groundwater Harvesting in Sus Basin, Solapur District Maharashtra, India.	EnviroGeoChimica Acta (2014) 1(4):270-278	ISSN: 2348 – 7259	2014
4	Mitigation Of Drought Using Modeling Studies For Groundwater Harvesting In Sus Basin, Solapur District Maharashtra, India.	Neo Geographia Vol. IV, Issue. I,	(ISSN-2319 – 5118) Impact Factor: 1.092	January 2015
5	A Geographical Study Of Tourist Centers In Aurangabad District- A Case Study Of Pitalkhora Cave, Taluka Kannad District Aurangabad(Ms)	Neo Geographia Vol. IV, Issue. I,	(ISSN-2319 – 5118) Impact Factor: 1.092	January 2015
6	Geomorphological Study For Rainwater Harvesting In Sus Basin Solapur District	Neo Geographia Vol. IV, Issue. I,	(ISSN-2319 – 5118) Impact Factor: 1.092	October 2015
7	Electric resistivity model for groundwater recharge in Sus basin Solapur District Maharashtra India	Research Journey International E- research journal	2348-7143	January 2020
8	Laps time for rise and fall in groundwater level and	Ajanta	2277-573 Impact factor	January- March 2019

	groundwater fluctuation studies in Sus basin of Solapur District, Maharashtra, India		5.5	
9	Demarcation of Feasible Sites for Rainwater Harvesting Using Study of Storativity and Transmisivity in Sus Basin, Solapur District, Maharastra, India	International Journal of Mechanical Engineering	ISSN: 0974- 5823	JanFeb. 2022
10	Hydrogeological Studies In Dubdubi Basin, Solapur District Maharashtra India.	Journal of the Indian academy of geosciences vol. 55, No. 1 pg. 27- 31		Dec.2012
11	Morphometric Analysis Of Sina Watershed In Madha Tahsil, Solapur District, Maharashtra.	International Journal of Creative Research Thoughts (IJCRT). Scholarly open access journals, Peer- reviewed, and Refereed Journals Volume 10,	ISSN: 2320- 2882 Impact factor 7.97	9 September 2022
12	Laps Time For Rise And Fall In Groundwater Level And Groundwater Fluctuation Studies In Sus Basin Of Solapur District, Maharashtra, India	Advances in Bioresearch	Online ISSN 2277-1573 Print ISSN 0976-4585 Impact Factor: 0.971 [UIF, Germany] GIF: 0.56 [Global Impact Factor, Australia]	Accepted
13	Geophysical Studies For Groundwater Harvesting In Sus Basin, Solapur District Maharashtra India"	Advances in Bioresearch	Online ISSN 2277-1573 Print ISSN 0976-4585 Impact Factor: 0.971 [UIF, Germany] GIF: 0.56 [Global Impact Factor, Australia]	Accepted
14.	Influence Of Geomorphologic Aspects, On Groundwater Regime In Angar Basin: A Case Study	Education & Society	ISSN-2278- 6864	Accepted
	"Synthesis, Characterization and Properties of New Processable Poly (ether-amide) s from 2, 2-Bis (p-methyl	Advances in Bioresearch	Online ISSN 2277-1573 Print ISSN 0976-4585	Accepted

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carboxyphenoxy) -1, 1-	Impact Factor :
binaphthyl and Aromatic	0.971 [UIF,
Diamines"	Germany]
	GIF: 0.56
	[Global Impact
	Factor,
	Australia]

# Conference /Seminars and Workshop

Sr. No.	Title of the paper presented	Title of Conference / Seminar, etc.	Date(s) of the event	Organized by	Whether International / National / State / Regional / University / College level
1	Lineament density and resistivity model studies for groundwater exploration in Sus basin	IGWC – 2012	Dec. 18 – 21, 2012	Maulana Azad College of Ars, Science and Commerce Aurangabad	International Conference
2	Hydrogeological investigation for mitigation of drought	Environmental Disaster Management for Sustainable Development	28 March 2013	Dept. Environmental Science, School of earth Science Solapur University Solapur	National Seminar
3	Modeling studies for groundwater harvesting in Sus basin Maharashtra India	Approaches in remote sensing and geographical information system	4 and 5 th April 2014	D.B.F. Dayanand College of Ars and Science Solapur Dept. of Geography and Geology	National
4	Electric Resistivity Model Study For Groundwater Harvesting In Sus Basin Solapur District Maharashtra India.	Water Management	27 &28 April 2015	Karad	State level seminar
5	Lineament Density and Hypsometric study for groundwater exploration in Sus basin Solapur district Maharashtra India	Interdisciplinary Approaches in Science	24 January 2017	Baburao patil College of Arts and Science Angar	National
6	Demarcation of suitable sites for rain water harvesting using morphometric	Interdisciplinary Approaches in Science	24 January 2017	Baburao patil College of Arts and Science Angar	National

	and hypsometric				
	analysis in Sus basin				
	Maharashtra, India				
7	Ground Water exploration	Conference (MRGESSD-)	2017	School of Earth science, Solapur university & Indian Society of Applied Geochemists,	National
8	Vadose zone and groundwater studies in Sus basin Solapur district Maharashtra India	Medicinal plant research callenges and prospects (MPRCP2019)	2019	Dept. of Botany Baburao Patil College of Arts and Science	National
9	Lineament Modeling studies for rainwater harvesting Sus basin Solapur District Maharashtra India	Advance Technique in Agriculture and Animal Husbandry	2019	Dept. of Zoology Baburao Patil College of Arts and Science	National
10	Laps time for rise and fall in groundwater level and groundwater fluctuation studies in Sus basin Solapur District Maharashtra India	Modification, Degradation and Stabilization of Polymers (MDSP 2019)	2019	Dept. of Chemistry Baburao Patil College of Arts and Science	National
11	Electric resistivity model study groundwater recharge in Sus basin	Introspection, Prognosis and Strategy for global water Resource	Jan 2020	Sammer Gandhi Kala Mahavidhyalya Malshiras	International
12	Demarcation of feasible sites for rain water harvesting using the study of storativity and transmissivity	Ecology, Economy, Emerging technology and people for Sustainable Livihood in SAARC Countries.	Jan-2022	SAARC University of Swabi, Khyber Pakhtunkhw, Pakistan.	International
13.	"Laps Time For Rise And Fall In Groundwater Level and Groundwater Fluctuation Studies In Sus Basin of Solapur District, Maharashtra, India"	"Recent Advances in Science (RAS)"	29th April, 2023.	Baburao Patil College of Arts and Science, Angar.	International
14	Influence of	"Recent Trends,	Date- 8	Jointly Organized	

Geomorphologic	Challenges and	th July	by the Ganpatrao	
Aspects, On	Issues in Social	2023.	Deshmukh	
Groundwater	Science and		Mahavidyalaya,	International
Regime in Angar	Languages"		Sangola &	211001110010101
Basin: A Case Study			Department of	
			Geography and	
			Internal Quality	
			Assurance	
			Cell (IQAC) In	
			collaboration with	
			Solapur Bhoogol	
			Shikshak Sangh,	
			Solapur and	
			Pangaea	
			Geographical	
			Association, India	

## **Research Project**

Sr. No	Name of Project	<b>Sponsoring Agency</b>	Year
1	Rain water harvesting in Angar Basin	P.A.H. Solapur	2022
	using the electric resistivity.	University Solapur	

## **Faculty Empowerment:-**

Name of the Course / Summer School	Place	Duration	Sponsoring Agency
Orientation	ASC,Jabalpur	04/08/14-30/08/20014	UGC
Refresher Course	Pondichhery	2/1/2018 -22/1/2018	UGC
Refresher Course	Goa	7/1/2020 -27/1/2020	UGC
Online One week FDP on Open Source Tools For Research organized by TLC of Ramanujan College, University of Delhi, New Delhi	Online Ramanujan College , University of Delhi ,New Delhi	8-06-2020 tom 14-06-2020 07 days	
Online One week FDP on Entrepreneurship, Incubation and Innovation organized by TLC of Ramanujan College, University of Delhi, New Delhi.	Online Ramanujan College , University of Delhi ,New Delhi	23-06-2020 to 29-06-2020 07 days	

## **University level Participation:**

Faculty members work as

Design the university syllabus of Geology (BOS)

Paper Setting

Paper Assessment

**External Examiner** 

**Internal Examiner** 

### **College level Participation**

- 1. Coordinator of IQAC
- 2. Member of College development Committee
- 3. Coordinator of Timetable Committee
- 4. Member of Anti-ragging Committee
- 5. Member of Tour Committee
- 6. Member of Discipline committee

### **Teaching Methods:**

- 1. PPT presentation
- 2. Google Classroom
- 3. Whatsapp groups
- 4. YouTube Videos
- 5. Traditional method
- 6. Zoom lectures

### **Activities:-**

- 1. Field visit and study tour.
- 2. Mineral and rock exhibition.
- 3. Remedial teaching.
- 4. Bridge course.
- 5. Geologist day on 24<sup>th</sup> August.
- 6. Environmental projects.
- 7. Quiz composition