


**DEPARTMENT OF EARTH SCIENCE,
UNIVERSITY OF KASHMIR**



CERTIFICATE

Certified that the dissertation entitled **“Water Level Fluctuations and Bathymetry Of Wular Lake”** submitted by **Atif Hussain Malla** under enrolment No. **21064120001** in partial fulfilment of requirements for the award of Master’s Degree in Applied Geology, Department of Earth Sciences, University of Kashmir. The content of submitted dissertation is the proprietary document of Department of Earth Sciences, University of Kashmir and proper permission from the undersigned is the required/mandatory for publishing or correspondence with respect to content of the dissertation. It is further certified that this work has not been submitted to any University for the award of any degree/diploma. I deem it fit for submission.


Signature of Supervisor
Name: Dr. Ghulam Jeelani
Designation: Professor


Signature of HOD

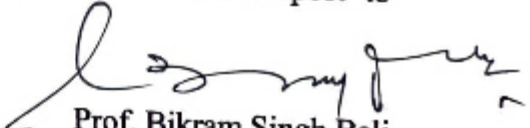
Department of Earth Sciences
University of Kashmir, Hazratbal
Srinagar-190006



CERTIFICATE

This is to certify that project work entitled **“Crustal Deformation Studies of Southern Segment of Kashmir Valley using GPS Data”** is an original contribution by **Muzzamil Ahmad Khanday**, student of M.Sc. Applied Geology (Enrolment No: 21064120002), 4th semester, Department of Earth Sciences, University of Kashmir. He has successfully completed his work under my supervision. To the best of my knowledge, this research work in the Kashmir Himalaya has not been submitted in part or in full for any Degree/Diploma/Fellowship or other similar titles to any candidate of any Institute/University.

The content of submitted dissertation is the proprietary document of Department of Earth Sciences, University of Kashmir and proper permission from the undersigned is mandatory for publishing or correspondence with respect to content of the dissertation.


Prof. Bikram Singh Bali
Supervisor



CERTIFICATE

This is to certify that "Micromorphological study of the lower part of Wanihama Loess-Paleosol Sequence, Kashmir Valley, India" is a bonafide work done by **Mr. Azhar Aziz**, under enrollment number **20064120003** during the year 2021-2023 for partial fulfillment of the credentials for the award of degree of **Master of Science in Applied Geology**, Department of Earth Sciences, University of Kashmir, Hazratbal, Srinagar, 190006.

Signature of Supervisor

Signature of H.O. D

CERTIFICATE



This is to certify that project work entitled "**Geological and structural mapping around the Manasbal Lake**" is an original contribution by **Naveed ul Islam**, student of M.Sc. Applied geology (Enrollment No: 21064120004), 4th semester, Department of Earth Sciences, University of Kashmir has successfully completed his work under my supervision. To the best of my knowledge, this research idea has not been submitted in part or in full for any Degree/Diploma/Fellowship or other similar titles to any candidate of any institute/university.

Signature of supervisor.

Professor Gh. Jeelani.

Signature of external examiner.



CERTIFICATE

This is to certify that the project titled "**Micro-Seismic Study of the Southern Segment of the Kashmir Valley using Broadband Seismometer Observations**," carried out by **Javaid Ahmad Naik, M.Sc.** Applied Geology semester IV, Enrollment No: **21064120005**, at the Department of Earth Sciences, University of Kashmir, has been carried out under my guidance. To the best of my knowledge, the research concept from the study area has not been previously presented, either partially or entirely, for any academic degree, diploma, fellowship, or similar credentials by any other candidate from any educational institution.

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A handwritten signature in black ink, appearing to read 'Bikram Singh Bali', is written over a horizontal line.

Dr. Bikram Singh Bali
(Professor and HOD)



CERTIFICATE

This is to certify that “**Phytolith studies of the Upper part of the Dubjan Member of Karewas, Kashmir Valley, India**” is a bonafide work done by **Basit Maqbool Wani**, under enrollment number **21064120006** during the year 2021 – 2024 for partial fulfillment of the credentials for the award of degree of **Master of Science in Applied Geology**, Department of Earth Sciences, University of Kashmir, Srinagar 190006. It is further certified that this work has not been submitted to any University for the award of any Degree/Diploma.

A handwritten signature in blue ink, appearing to be "Basit Maqbool Wani".

Signature of Supervisor

A handwritten signature in blue ink, appearing to be "Dr. ...".

Signature of HOD



CERTIFICATE

It is certified that the dissertation work entitled "**Hydrological and chemical characteristics of Springs of the Mawar Basin**" carried out by **Nusrat Qureshi** bearing Roll No: **20064120007** under the supervision of **Prof. Ghulam Jeelani** during the year 2020-2023 in the partial fulfilment of the requirements for the award of the degree of Masters of Science in Applied Geology, Department of Earth Sciences, University of Kashmir, Srinagar, J&K. The content of the submitted dissertation is the proprietary document of the Department of Earth Sciences, University of Kashmir and proper permission from the undersigned is mandatory for publishing the content of this dissertation. It is further certified that this work has not been submitted to any university for the award of any degree so far.

A handwritten signature in black ink, appearing to read "G. Jeelani".

Signature of Supervisor

Name: Dr. Ghulam Jeelani

Designation: Professor

A handwritten signature in blue ink, appearing to read "R. Singh".

Signature of HOD

**Department of Earth Science
University Of Kashmir
Srinagar**




CERTIFICATE

This is to certify that the dissertation entitled **“Geomorphological and Geophysical Studies of parts of Central and Northern Segments of Kashmir Valley using GPR”** has been independently and authentically carried out by **Asmat Mehraj** bearing Enrolment no. 21064120008, Semester 4th, Batch 2021 under the supervision of **Dr. Bikram Singh Bali (Professor and Head)**, for partial fulfilment of the requirements for the award of **Master’s Degree in Applied Geology, Department of Earth Science, University of Kashmir.**

 22/12/23

**Prof. Bikram Singh Bali
(Supervisor)**

 22/12/23

**Prof. Bikram Singh Bali
Head of the Department**



CERTIFICATE

This is to certify that “**Micromorphological study of the Middle section of Wanihama Loess-Paleosol sequence, Kashmir Valley, India**” is a bonafide work done by **Mr. Suheel Ahmad Shah**, under enrollment number **20064120009** during the year 2023-2024 for partial fulfillment of the credentials for the award of degree of **Master of Science in Applied Geology**, Department of Earth Sciences, University of Kashmir, Hazratbal, Srinagar, 190006.

Signature of Supervisor

Signature of HOD

**DEPARTMENT OF EARTH SCIENCE,
UNIVERSITY OF KASHMIR**



CERTIFICATE

Certified that the dissertation entitled **“Petrographic Study of Permo-Triassic Rock Sequence (P-T Boundary) Guryul Ravine Khunamuh, Jammu and Kashmir India.”** Submitted by **Safiya Manzoor** under enrolment No. **21064120010** in partial fulfilment of requirements for the award of Master’s Degree in Applied Geology, Department of Earth Sciences, University of Kashmir. The content of submitted dissertation is the proprietary document of Department of Earth Sciences, University of Kashmir and proper permission from the undersigned is the required/mandatory for publishing or correspondence with respect to content of the dissertation. It is further certified that this work has not been submitted to any University for the award of any degree/diploma. I deem it fit for submission.

A handwritten signature in blue ink, appearing to read 'Zubair'.

Signature of Supervisor

Name: Dr. Malik Zubair

Designation: Assistant Professor

A handwritten signature in blue ink, appearing to be a stylized name.

Signature of HOD



CERTIFICATE

This is to certify that project work entitled **“Field and Petrography of the Panjal Traps of Naranag, Ganderbal, JK, NW India”** is an original contribution by **Nawaz Faisal Yousuf Dar**, student of M.Sc. Applied geology (**Enrollment No: 21064120011**), 4th semester, Department of Earth Sciences, University of Kashmir has successfully completed his work under the supervision of **Dr. Akhtar Rasool Mir**. It is certified that this work is not submitted to any other Institute for the award of any degree.


Signature of supervisor


Signature of Head of the Department


Signature of external evaluator

Date 27/12/23

Department of Earth Science



CERTIFICATE

This is to certify that “**Geomorphology of Lidder River**” is a bonafide work carried out by **Syed Rabia Gul** during the session **2021-2023** in partial fulfillment of the requirements for the award of degree of Master of Science in Applied Geology, Department of Earth Sciences, University of Kashmir, Srinagar, Jammu and Kashmir, India. It is further certified that this work has not been submitted to any University for the award of any Degree.

Signature of Supervisor

Riyaz Ahmad Dar
Assistant professor

Signature of H.O.D

CERTIFICATE



This is to certify that "**Fluvial Geomorphic study of Drass Basin**" is a bonafide work carried out by **Ms. MEHNAZ AKHTER** during the session 2021-2023 in partial fulfilment of the requirements for the award of the degree of Master of Science in Applied Geology, Department of Earth Sciences, University of Kashmir, Srinagar, Jammu and Kashmir, India. It is further certified that this work has not been submitted to any University for the award of any Degree.

A handwritten signature in blue ink, appearing to read 'Zubair'.

Signature of Supervisor

Name: **MALIK ZUBAIR AHMAD**

Assistant professor

A handwritten signature in blue ink, appearing to be a stylized name.

Signature of

Head of the Department

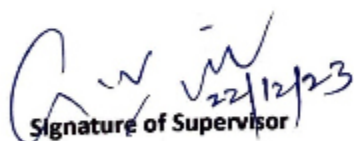
DEPARTMENT OF EARTH SCIENCES
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CERTIFICATE

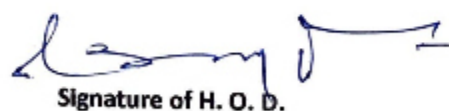


This is to certify that "**Petrography and Sedimentological characteristics of Paleozoic succession of Kupwara district, JK, India**" is a bonafide work done by **Mr. Haroon Rashid**, (Enrollment number 21064120017) during the year 2021 – 2023 under the supervision of Dr. Akhtar Rasool Mir, for partial fulfillment of the credentials for the award of degree of **Master of Science in Applied Geology**, Department of Earth Sciences, University of Kashmir, Srinagar 190006.

It is further certified that this work has not been submitted to any University for the award of any Degree/Diploma.


Signature of Supervisor

Signature of External Evaluator


Signature of H. O. D.

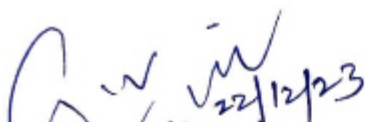
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This is to certify that “**Petrography and Sedimentological characteristics of Paleozoic succession of Kupwara district, JK, India**” is a bonafide work done by **Mr. Haroon Rashid**, (Enrollment number **21064120017**) during the year **2021 – 2023** under the supervision of **Dr. Akhtar Rasool Mir**, for partial fulfillment of the credentials for the award of degree of **Master of Science in Applied Geology**, Department of Earth Sciences, University of Kashmir, Srinagar 190006.

It is further certified that this work has not been submitted to any University for the award of any Degree/Diploma.


Signature of Supervisor

Signature of External Evaluator


Signature of H. O. D.

Department of Earth Sciences

University of Kashmir, Hazratbal Srinagar-190006 J&K

CERTIFICATE

This is to certify that "**Phytolith studies of the Lower part of the Dubjan Member of Karewas, Kashmir Valley, India**" is a bonafide work done by **Mr. Shakir Mushtaq**, under enrollment number **21064120018** during the year 2021 – 2023 for partial fulfillment of the credentials for the award of degree of **Master of Science in Applied Geology**, Department of Earth Sciences, University of Kashmir, Srinagar 190006. It is further certified that this work has not been submitted to any University for the award of any Degree/Diploma.



Signature of Supervisor



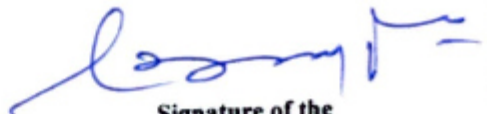
Signature of HOD

CERTIFICATE

This is to certify that "Geomorphological study of Mawar Basin, Kashmir valley UT, India" is a bonafide work carried out by **Sonober Jan** during the session 2021-2023 in partial fulfillment of the requirements for the award of degree of Master of Science in Applied Geology, Department of Earth Sciences, University of Kashmir, Srinagar, Jammu and Kashmir, India. It is further certified that this work has not been submitted to any University for the award of any Degree. I deem it fit for submission.



Signature of supervisor
Dr. Malik Zubair Ahmad
(Assistant professor)



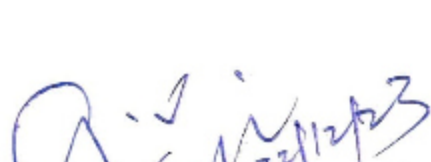
Signature of the
Head of the Department




CERTIFICATE

This is to certify that **Ms. UKASHA JAN**, Roll no. **2064120020** , conducted his dissertation project entitled **Petrography and Field Characteristics of Early Paleozoic Kangan Granites, Ganderbal, JK, NW India**, under the supervision of **Dr. Akhtar Rasool Mir**. This research work was undertaken for the partial fulfilment of the requirements for the degree of **Master of Science in Applied Geology** at the **Department of Earth Science, University of Kashmir, JK**.

It is further certified that this work has not been submitted to any University for the award of any Degree/Diploma.


Signature of Supervisor


Signature of External Evaluator


Signature of H. O. D.

Certificate



This is to certify that it is a bonified work done by **Mrs. Sofiya Naz** o
Geomorphic study of Munawar Tawi River, India during the year
2021-2023 in partial fulfilment of the requirements for the award of
degree of Master of Science in Applied Geology, Department of Earth
Science, University of Kashmir, Srinagar, J&K India. It is further
certified that this work has not been submitted to any university for the
award of any Diploma/Degree.

Signature of Supervisor

A handwritten signature in blue ink, appearing to read 'Zubair Ahmad'.

Name: **Dr. Malik Zubair Ahmad**

Designation: **Assistant Professor**

Signature of H.O.D

A handwritten signature in blue ink, appearing to be a stylized name.

**Department of Earth Sciences
University of Kashmir**



CERTIFICATE

This is to certify that the project work entitled **“Petrology and Morphology of Pillow Basalts of Early Permian Panjal Traps, JK, NW India”** is an original contribution by **Gazala Yousuf**, student of M.Sc. Applied Geology (Enrolment No: 21064120022), 4th semester, **Department of Earth Sciences, University of Kashmir**. It is further certified that this work has not been submitted to any University for the award of any degree.


Dr. Akhtar Rasool Mir
(Supervisor)


Prof. Bikram Singh Bali
(Head of Department)

Signature of External Evaluator

Department of Earth Science



Certificate

This is certify that “**Geomorphology of Jhelum River from Srinager to Uri Baramulla**” is a bonified work done by **Mrs. MEHNAZA AKHTER** during the year 2021-2023 in partial fulfillment of the requirements for the award of degree of Master of Science in Applied Geology, Department of Earth Science, University of Kashmir, Srinagar, J&k India. It is further certified that this work has not been submitted to any university for the award of any Diploma/Degree.

Supervisor:

Dr. Malik Zubair Ahmad
(Assistant Professor)


Signature of H.O.D

**DEPARTMENT OF EARTH SCIENCE,
UNIVERSITY OF KASHMIR, SRINAGAR**

CERTIFICATE




This is to certify that "Morphology and Petrography of Columnar joint basalts of Early Permian Panjal traps, Kashmir, JK, NW India" is a bonafide work carried out by **Ms. Kawser Majeed** during the session 2021-2023 in partial fulfilment of the requirements for the award of degree of **Ms. Kawser Majeed** in Applied Geology, Department of Earth Sciences, University of Kashmir, Srinagar, JK, India. It is further certified that this work has not been submitted to any University for the award of any Degree.


Signature of Supervisor

Name: Dr. Akhtar Rasool Mir
Designation: Assistant professor

Signature of External Expert/Evaluator

Name:
Designation:


Signature of the
Head of the department

CERTIFICATE



This is to certify that “**Micromorphology of Loess-Paleosol sequence of Upper section at Wanihama**” is a bonafide work done by **Ms. Uzma**, under enrollment number **21064120025** during the year 2023-2024 for partial fulfillment of the credentials for the award of degree of Master of Science in Applied Geology, Department of Earth Sciences, University of Kashmir, Hazratbal, Srinagar,

A handwritten signature in purple ink, consisting of a large loop followed by a long horizontal stroke.

Signature of Supervisor

A handwritten signature in blue ink, appearing as a series of connected loops and a long horizontal stroke.

Signature of H.O. D

Department of Earth Science



CERTIFICATE

This is to certify that “**Geomorphic study of Kehmil basin, NW Himalaya**” is a bonafide work carried out by **Ms. Ishrat Manzoor** during the session 2021-2023 in partial fulfillment of the requirements for the award of degree of Master of Science in Applied Geology, Department of Earth Sciences, University of Kashmir, Srinagar, Jammu and Kashmir, India. It is further certified that this work has not been submitted to any University for the award of any Degree.

Signature of Supervisor:

Dr. Malik Zubair Ahmad
(Assistant professor)

Signature of H.O.D

DEPARTMENT OF EARTH SCIENCES

University Of Kashmir

Srinagar



CERTIFICATE

This is to certify that the dissertation entitled **“Petrography and field characteristics of early Palaeozoic Baramulla Granite, Baramulla, JK, India”** is the bonafide work of **Falak Fayaz** bearing Enrolment No. 21064120028, Semester 4th, batch 2021 for the partial fulfilment of requirements for the completion of **Master’s Degree in Applied Geology**. The work has been completed under the supervision of Dr. Akhtar Rasool Mir, and may be placed before the examiner.


Dr. Akhtar Rasool Mir

(Supervisor)



Prof. Bikram Singh Bali

Head of the Department