

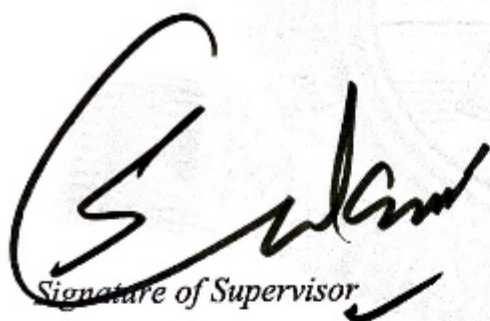


Department of Earth Sciences

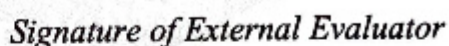
University Of Kashmir, Srinagar – 190006, J & K

CERTIFICATE

It is to certify that the dissertation “GROUNDWATER DYNAMICS AND THE DELINEATION OF AQUIFERS IN ANANTNAG AND KULGAM” submitted by Mohd Shahid Mir, in partial fulfillment of Post-Graduation in Applied Geology, Department of Earth Sciences, University of Kashmir, is the record of his own work carried out by him under my supervision and guidance. The matter embodied in this dissertation has not been carried for the award of any other degree.



Signature of Supervisor



Signature of External Evaluator



Signature of the Head

DEPARTMENT OF EARTH SCIENCES



CERTIFICATE

This is to certify that project work entitled **“Spatial Distribution of Local seismic Events in the Kashmir Valley, using Broadband Seismometer”** is an original contribution by **Tawseef Nazir**, student of M.Sc. Applied geology (Enrollment No: 20064120003), 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.

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

Signature of Supervisor

Dr. Bikram Singh Bali

Professor and Head

Certificate



This is certify that it is a bonified work done by **Mrs. Misbah Khurshid** during the year 2020-2023 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.

A handwritten signature in blue ink, appearing to read 'Dr. Reyaz Ahmad Dar'.

Signature of Supervisor:

Name: Dr.Reyaz Ahmad Dar

Designation: Assistant Professor

A handwritten signature in black ink, appearing to read 'Dr. Reyaz Ahmad Dar', with the date '17.04.2023' written below it.

Signature of Head of Department

Department of Earth Science, University of Kashmir,190006


DEPARTMENT OF EARTH SCIENCES
University of Kashmir
Srinagar

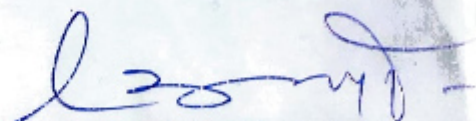


Dated:

CERTIFICATE

This is to certify that the Dissertation entitled **“Tectonic Geomorphology of Kishanganga Basin, North and North Western Kashmir Valley, Jammu and Kashmir, India”** is the bona-fide work of **Sabeena Manzoor** bearing Enrolment No. **20064120005**, Semester **4th**, **Batch 2020** for the partial fulfilment of requirements for the completion of Master’s Degree in Applied Geology. The work has been completed under my guidance and supervision, and may be placed before the examiner.


Prof. Bikram Singh Bali
(Supervisor)


Prof. Bikram Singh Bali
Head of the Department

External Examiner



CERTIFICATE

This is to certify that project work entitled **“Estimation Of Seismogenic Layer/Focal Depth Using Broadband Seismometer”** is an original contribution by NAZAKAT HAMID, student of M.Sc. Applied geology (Enrollment No: 20064120006), 4th semester, Department of Earth Sciences, University of Kashmir has successfully completed her 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.

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

Signature of supervisor

Dr. Bikram Singh Bali

Professor and Head

Department of Earth Sciences

University of Kashmir



CERTIFICATE

This is to certify that it is a bonafide work done by **Urooj Aijaz** under **enrollment no 20064120007** during the year 2020-2022 in partial fulfillment of the requirement 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/Diploma.


Supervisor


Head of the Department



Department of Earth Sciences
University of Kashmir 190006

Certificate

This is to certify that the work presented in this dissertation entitled "**Groundwater Dynamics and Aquifer Mapping in Pulwama and Surroundings**" carried out by **Ms. Zahida Maqbool Bhat** enrolment no. **20064120009**, student of **M.sc Batch 2020 of Applied Geology, Department of Earth Sciences University of Kashmir, Srinagar**. This work has been carried out under my supervision and has not been submitted anywhere in part or full for award of any degree in this or any other University. The candidate has fulfilled all the requirements and formalities as required under the statutes for the submission of the master's dissertation.

A handwritten signature in black ink, appearing to read 'G. Geelani'.

Supervisor
Dr. Ghulam Geelani
Professor
Department of Earth Sciences
University of Kashmir
Srinagar


Head of the Department

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



CERTIFICATE

Certified that the dissertation entitled "**Groundwater dynamics and aquifer mapping in selected parts of central Kashmir**" submitted by **Iqra Javeed** under enrolment No. **20064120010** 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.


Surinam Geelani
Professor
Department of Earth Sciences
University of Kashmir
Srinagar

Head of Department

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



CERTIFICATE

This is to certify that project work entitled **“Crustal deformation Studies of North-Western (NW) segment of Kashmir valley using GPS measurements”** is an original contribution by **NAJMA SHABIR**, student of M.Sc. Applied geology (Enrolment No: 20064120011), 4th semester, Department of Earth Sciences, University of Kashmir. She has successfully completed her 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.

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

Prof. Bikram Singh Bali

Certificate



This is to certify that “**Geomorphic study of Doodhganga River, Kashmir Valley, India**” is bonafide work done by **Aasiya Mushtaq** during the year 2020–2023 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 190006, Srinagar.

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

A blue ink signature, appearing to be 'Aasiya Mushtaq', written in a cursive style.

Signature of Supervisor

A green ink signature, appearing to be 'A. Mushtaq', written in a cursive style. To the right of the signature, the date '17.04.23' is written in green ink.

Signature of H.O. D

Signature of External evaluator

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



CERTIFICATE

This is to certify that project work entitled "Estimation of Crustal Deformation Rate along Pir Panjal Range using GPS measurements" is an original contribution by NASREENA MAJEED, student of M.Sc. Applied geology (Enrolment No: 20064120013), 4th semester, Department of Earth Sciences, University of Kashmir has successfully completed her 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.

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

**Signature of Supervisor
Dr. Bikram Singh Bali
Professor & Head**



CERTIFICATE

It is certified that the dissertation work entitled "GROUNDWATER DYNAMICS AND AQUIFER MAPPING IN AND AROUND THE BANDIPORA AREA OF KASHMIR VALLEY" Carried out by Munazah Mohammad bearing Roll No; 20064120016 under the supervision of Prof. Ghulam Jeelani during the year 2020-2023 in the partial fulfillment of the requirements for the award of the degree of Masters of Science in Applied Geology, Department of Earth Sciences, Kashmir University, Srinagar, Jammu and Kashmir, India. 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', written over a light blue circular stamp.

Signature of Supervisor

Name: Dr. Ghulam Jeelani

Designation: Professor

Signature of External Expert/

Evaluator

Name:

A handwritten signature in black ink, written over a light blue circular stamp.

Signature of HOD



CERTIFICATE

This is to certify that **Mr. Wasim Ahmad Khoker**, Roll No. **20064120014** worked under the supervision of **Dr. Bikram Singh Bali, Professor and Head** during the academic year 2020-2022 for his dissertation project work entitled **“Morphotectonic study of Batamaji River Basin NW Himalayas Jammu & Kashmir”** for the partial fulfillment of the requirements for the award of degree of **Master of Science in Applied Geology, Department of Earth Science, University of Kashmir, J&K.**

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

Signature of Supervisor

Dr. Bikram Singh Bali

Professor & Head

Wasim Ahmad Khoker



Department of Earth Sciences

University of Kashmir, 190006

CERTIFICATE

This is to certify that project work entitled "Groundwater dynamics and aquifer mapping in Handwara and surrounding areas of Kashmir Valley " is an original contribution by **Waseem Ashraf**, student of M.Sc. Applied geology (Enrolment No: 20064120015), 4th semester, Department of Earth Sciences, University of Kashmir. 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.

A handwritten signature in black ink, appearing to read "S. Gulami".

Supervisor

External Examiner

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

Head of the Department



**DEPARTMENT OF EARTH SCIENCES UNIVERSITY
OF KASHMIR HAZRATBAL, SRINAGAR-190006**

CERTIFICATE

It is certified that the dissertation work entitled "groundwater dynamics and aquifer mapping in and around the Anantnag area of Kashmir valley" Carried out Wajid Ramzan Shah, bearing Roll No; 20064120017 under the supervision of Prof. G 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, Kashmir University, Srinagar, Jammu And Kashmir, India. 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.

External Examiner


Supervisor


Head of the Department



CERTIFICATE

This is to certify that **Mr. MANAZAR HUSSAIN SHAH**, Roll No. **20064120018** worked under the supervision of **Dr. Bikram Singh Bali**, Professor and Head during the academic year 2020-2022 for his dissertation project work entitled "**GPR Profiling in Watlab and surrounding areas NW Himalaya, J&K India** for the partial fulfillment of the requirements for the award of degree of Master of Science in **Applied Geology**, Department of Earth Science, University of Kashmir, J&K.

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

A handwritten signature in black ink, appearing to read 'Bikram Singh Bali', with a horizontal line extending to the right.

Signature of Supervisor

Dr. Bikram Singh Bali
(Professor & Head)

Manazar Hussain Shah

CERTIFICATE



This is to certify that **"PHYTOLITH STUDY OF PATTAN LOESS-PALEOSOL SEQUENCE, KASHMIR VALLEY"** is a bonafide work done by **Mr. Mudasir Mohd Hajam**, under enrollment number **20064120019** during the year **2020 – 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.

A blue ink signature of the supervisor, written in a cursive style.

Signature of Supervisor

A blue ink signature of the external evaluator, written in a cursive style.

Signature of External Evaluator

A blue ink signature of the Head of Department, written in a cursive style.

Signature of H. O. D



CERTIFICATE

This is to certify that project work entitled “**Identification of local Seismic events using primary and secondary waves**” is an original contribution by **Haroon Nazir**, student of M.Sc. Applied geology (Enrollment No: 20064120020), 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.

A handwritten signature in black ink, appearing to read "Dr. Bikram Singh Bali".

Signature of supervisor

Dr. Bikram Singh Bali

Professor and Head

GPS Studies of the Srinagar City and Adjoining Areas
Project

**Submitted for the partial fulfillment of the requirement
for the award of the degree of**

Master of Science
In
Applied Geology

By
Sadath Ara Lone

(Enrolment No: 20064120021)

Under the Supervision of
Dr. Bikram Singh Bali
Professor and Head

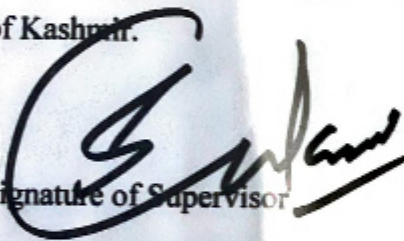


Department of Earth Sciences
University of Kashmir, Srinagar, 190006
Year – 2023

Certificate



Certified that the dissertation entitled "Groundwater dynamics and aquifer mapping in selected parts of north Kashmir" submitted by Saima Rashid Roll No 22 required as partial fulfillment for the award of Master Degree in Applied Geology at the Department of Earth Sciences, University of Kashmir.


Signature of Supervisor

Name: Dr. Ghulam Jeelani

Designation: Professor

Designation

Signature of External Expert/
Evaluator

Name:

Name:


Head of the Department

DEPARTMENT OF EARTH SCIENCE

Department of Earth Sciences
University of Kashmir

CERTIFICATE

This is to certify that it is a bonafide work done by Bismah Farooq during the year 2020-22 in the partial fulfilment of the requirement for the award of degree of Master of Science in Applied Geology in 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 award of any Degree.



Supervisor



Head of Department



CERTIFICATE

This is to certify that the dissertation work entitled "GROUNDWATER DYNAMICS AND AQUIFER MAPPING IN GANDERBAL DISTRICT OF KASHMIR VALLEY" embodies the original research work of Mr. Yasir Mushtaq Mir , S/o Mushtaq Ahmad Mir, R/o Kijpora Kangan Ganderbal, Enrollment no: 20064120024, Batch 2020 Master of Science in Applied Geology (4th semester). He/she had done his/her dissertation under the supervision of Professor Ghulam Jeelani Department of Earth sciences university of Kashmir. To the best of my knowledge and belief the dissertation of the candidate is original, which is requirement to meet the ordinance relating to M.sc Applied Geology Master's degree of the University of Kashmir.

A large, stylized handwritten signature in black ink, likely belonging to Dr. Ghulam Jeelani.

Signature of Supervisor

Name: Dr. Ghulam Jeelani

Designation: Professor

Signature of External Expert/Evaluator

Name:

A handwritten signature in blue ink, followed by the date 17/03/23 written in blue ink.

Signature of the HOD

DEPARTMENT OF EARTH SCIENCES

CERTIFICATE



This is to certify that **"PHYTOLITH STUDY OF PUTKHAH LOESS-PALEOSOL SEQUENCE, KASHMIR VALLEY"** is a bonafide work done by **Mr. Irfan Ahmad Lone**, under enrollment number **20064120026** during the year **2020 – 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.

A blue ink signature of the Supervisor.

Signature of Supervisor

A blue ink signature of the External Evaluator.

Signature of External Evaluator

A blue ink signature of the Head of Department (H. O. D).

Signature of H. O. D

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



CERTIFICATE

This is to certify that project work entitled “**To estimate the Crustal deformation rate in the south eastern segment of Kashmir valley**” is an original contribution by **AIMAN FIRDOUS**, student of M.Sc. Applied geology (Enrolment No: 20064120025), 4th semester, Department of Earth Sciences, University of Kashmir has successfully completed her 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.

A handwritten signature in black ink, appearing to be 'Bikram Singh Bali', written in a cursive style.

Prof. Bikram Singh Bali
Supervisor