



PATKAI CHRISTIAN COLLEGE (AUTONOMOUS)

Chümoukedima- Seithekema B.P.O Patkai-797 103,

Chümoukedima District, Nagaland, India

Affiliated to Nagaland University

NAAC Accreditation: Grade B⁺⁺ (4th Cycle)

“A College with potential for Excellence” // A Post-graduate College

The college has initiated steps that serve as ecosystem for transfer of knowledge to the students in the following manner:

The department of Botany possess a Green house where variety of Anthurium is grown. Floriculture and Mushroom cultivation are offered as skill enhancement courses to the students. The students are taught methods of nursery management and principles of garden designs, and basic methods of cultivation of ornamental plants, packaging and arranging commercial flowers. Extension programme like workshop, hands-on training etc have been organized for students, youth and women of neighbouring areas.

Geology department has plethora of minerals, rock and fossil comprising approximately about 400-500 samples serving as a display unit in educating the students of UG and PG courses, The samples include a good number of floral and faunal species from Silurian till Recent.

The department of History maintains a heritage museum in the library complex with a special focus on tribal or local culture Students are involved in collection of artefacts for the museum from places of historical importance in the region The museum also has collection of audio and visual records of walking archives (octogenarians)

The Music curriculum prepares the students to be entrepreneurs by way of starting their own music studios or getting employment in bigger establishments. Basic courses in computer music applications and composing & arranging are helping students to create and record their compositions for dissemination thereby giving services to their communities. Courses like World Music Cultures, Ethno Music-Arts, and Naga Music are helping students to understand their own ethnic music as well as others through research projects. The recordings (CDs and MP3 files) and interviews collected from projects are archived in the Music Library in the hope that Patkai will become a repository of worth for the preservation and dissemination of Naga folk music.

Zoology department maintains an aquarium for culture of locally available ornamental fishes. The department has a good collection of local reptiles and other animals in the museum. Pisciculture and apiculture are taught in skill enhancement courses where the students are given practical exposure to the indigenous methods of fish farm management and types of culture like mono and poly fish culture.

The Indo-Myanmar Tribal Research Centre (IMTRC) houses books and materials that are of immense help to researchers.



PATKAI CHRISTIAN COLLEGE (AUTONOMOUS)

Chümoukedima- Seithekema B.P.O Patkai-797 103,

Chümoukedima District, Nagaland, India

Affiliated to Nagaland University

NAAC Accreditation: Grade B⁺⁺ (4th Cycle)

“A College with potential for Excellence” // A Post-graduate College

The natural landscaping and campus surroundings of sprawling jungle, natural waterbodies, streams and rivers provide essential ecosystem for field-study and research. The college has its own fisheries, horticulture, plantation (rubber and teak), timber enabling students and faculty members to learn and develop praxis oriented knowledge on the biodiversity of fauna and flora.

All the departments have an Assignment Writing and Project Works as part of the curriculum with an aim to motivate students towards research and practical understanding analysis of the subject matter

Principal
Patkai Christian College
Chümoukedima : Seithekema



Patkai Christian College (Autonomous)

Chümoukedima-Seithekema, B.P.O. Patkai- 797103, Chümoukedima District, Nagaland,
India

Affiliated to Nagaland University




Recognised by UGC under 2F & 12B of the UGC Act 1956 in 1988

NAAC Accreditation: Grade B++ (Fourth Cycle)

"A College with Potential for Excellence" // A Post-Graduate College

RESEARCH FACILITIES

Name of Department: **BOTANY**

| Sl No | Instrument | Application | Image |
|-------|--|---|--|
| 1 | Autoclave (Purchased through College Fund) | To sterilize equipment and materials by subjecting them to high-pressure steam at elevated temperatures |  |
| 2 | Laminar Air Flow (Purchased through College Fund) | To provide a sterile work environment |  |
| 3 | Hot Air Oven (Purchased through College Fund) | To sterilize equipment and materials by dry heat. |  |





Patkai Christian College (Autonomous)


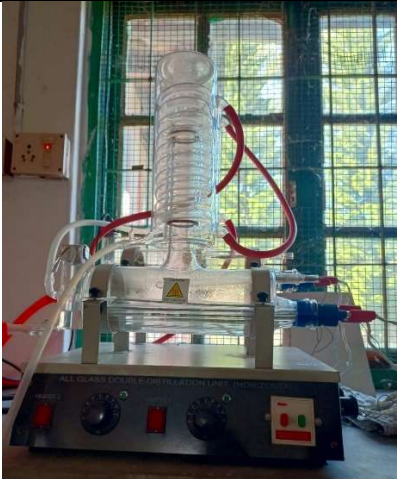

Chümoukedima-Seithekema, B.P.O. Patkai- 797103, Chümoukedima District, Nagaland,
India

Affiliated to Nagaland University

Recognised by UGC under 2F & 12B of the UGC Act 1956 in 1988

NAAC Accreditation: Grade B++ (Fourth Cycle)

"A College with Potential for Excellence" // A Post-Graduate College

| Sl No | Instrument | Application | Image |
|-------|--|---|--|
| 4 | Microscope (Purchased through College Fund) | Microscopic study of plant parts, sections, etc... |  |
| 5 | Distillation Apparatus (Purchased through College Fund) | To produce distilled water for various uses |  |
| 6 | Incubator (Purchased through College Fund) | To maintain a controlled environment of temperature, humidity, gas concentration for growth of cells and tissues. |  |





Patkai Christian College (Autonomous)




Chümoukedima-Seithekema, B.P.O. Patkai- 797103, Chümoukedima District, Nagaland,
India

Affiliated to Nagaland University

Recognised by UGC under 2F & 12B of the UGC Act 1956 in 1988

NAAC Accreditation: Grade B++ (Fourth Cycle)

"A College with Potential for Excellence" // A Post-Graduate College

| Sl No | Instrument | Application | Image |
|-------|---|---|--|
| 7 | Biological oxygen demand incubator (Purchased through College Fund) | to maintain a stable temperature and environment for measuring BOD of water samples to assess water quality |  |
| 8 | Soxhlet apparatus (Purchased through College Fund) | To extract biochemical compounds from a plant material. |  |
| 9 | Clevenger apparatus (Purchased through College Fund) | To extract oil from plants. |  |





Patkai Christian College (Autonomous)




Chümoukedima-Seithekema, B.P.O. Patkai- 797103, Chümoukedima District, Nagaland,
India

Affiliated to Nagaland University

Recognised by UGC under 2F & 12B of the UGC Act 1956 in 1988

NAAC Accreditation: Grade B++ (Fourth Cycle)

"A College with Potential for Excellence" // A Post-Graduate College

| Sl No | Instrument | Application | Image |
|-------|--|--|--|
| 10 | Magnetic stirrer (Purchased through College Fund) | To mix liquids or dissolve substances in a solution. |  |
| 11 | Hot water bath (Purchased through College Fund) | To heat substances uniformly for dissolving compounds or maintaining constant temperatures. |  |
| 12 | Colorimeter (Purchased through College Fund) | To measure the color intensity or absorbance of a solution to determine the concentration of substances. |  |

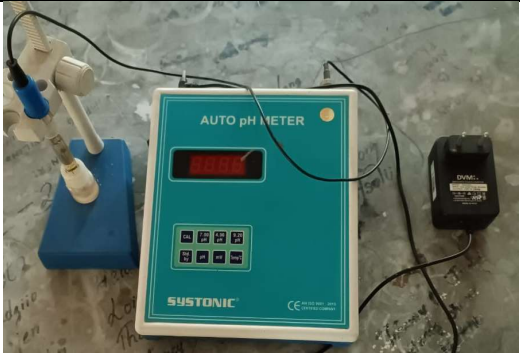








Patkai Christian College (Autonomous)

Chümoukedima-Seithekema, B.P.O. Patkai- 797103, Chümoukedima District, Nagaland, India

Affiliated to Nagaland University
Recognised by UGC under 2F & 12B of the UGC Act 1956 in 1988
NAAC Accreditation: Grade B++ (Fourth Cycle)
"A College with Potential for Excellence" // A Post-Graduate College

| Sl No | Instrument | Application | Image |
|-------|--|--|---|
| 13 | pH meter (Purchased through College Fund) | To measure the acidity or alkalinity of a test solution. |  |
| 14 | Haemocytometer (Purchased through College Fund) | To count & measure the concentration of cells, spores, etc. in a solution. |  |
| 15 | Centrifuge (Purchased through College Fund) | To separate liquid samples based on their densities. |    |





Patkai Christian College (Autonomous)

Chümoukedima-Seithekema, B.P.O. Patkai- 797103, Chümoukedima District, Nagaland,
India

Affiliated to Nagaland University



Recognised by UGC under 2F & 12B of the UGC Act 1956 in 1988

NAAC Accreditation: Grade B++ (Fourth Cycle)

"A College with Potential for Excellence" // A Post-Graduate College

RESEARCH FACILITIES

Name of Department: **CHEMISTRY**

| SI No | Instrument | Application | Image |
|-------|---|---|--|
| 1 | Digital conductivity meter (Purchased through College Fund) | Used in experiments involving conductance measurements. |  |
| 2 | Digital PH meter (Purchased through College Fund) | Used in experiments involving measuring pH of liquid samples. |  |





Patkai Christian College (Autonomous)



Chümoukedima-Seithekema, B.P.O. Patkai- 797103, Chümoukedima District, Nagaland,
India

Affiliated to Nagaland University

Recognised by UGC under 2F & 12B of the UGC Act 1956 in 1988

NAAC Accreditation: Grade B++ (Fourth Cycle)

"A College with Potential for Excellence" // A Post-Graduate College

| Sl No | Instrument | Application | Image |
|-------|--|---|--|
| 3 | UV-Visible Spectrophotometer (Purchased through College Fund) | To estimate the absorbance, concentration & wavelengths of liquid samples subjecting in the UV-Visible region. subjecting in the visible region. |  |
| 4 | Digital Colorimeter (Purchased through College Fund) | To measure absorbance, wavelength and concentrations of colored liquid samples |  |





Patkai Christian College (Autonomous)

Chümoukedima-Seithekema, B.P.O. Patkai- 797103, Chümoukedima District, Nagaland,
India

Affiliated to Nagaland University
Recognised by UGC under 2F & 12B of the UGC Act 1956 in 1988

NAAC Accreditation: Grade B++ (Fourth Cycle)
"A College with Potential for Excellence" // A Post-Graduate College

RESEARCH FACILITIES

Name of Department: **GEOLOGY**

| Sl No | Instrument | Application | Image |
|-------|---|--|-------|
| 1 | Microscopes (Purchased through College Fund) | Microscopic investigation of minerals and rocks | |
| 2 | Stereopairs (Purchased through College Fund) | Viewing and interpretation of aerial photographs | |





Patkai Christian College (Autonomous)



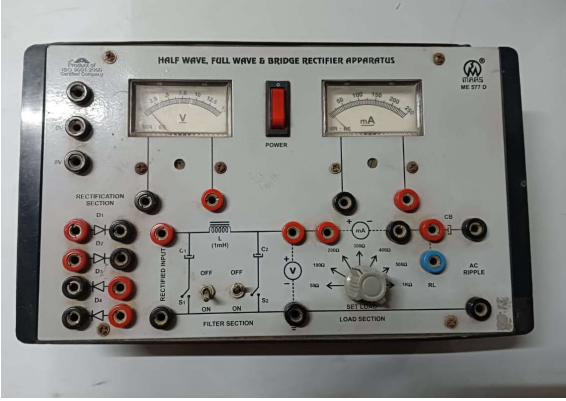
Chümoukedima-Seithekema, B.P.O. Patkai- 797103, Chümoukedima District, Nagaland,
India

Affiliated to Nagaland University
Recognised by UGC under 2F & 12B of the UGC Act 1956 in 1988

NAAC Accreditation: Grade B++ (Fourth Cycle)
"A College with Potential for Excellence" // A Post-Graduate College

RESEARCH FACILITIES

Name of Department: **PHYSICS**

| Sl No | Instrument | Application | Image |
|-------|---|---|--|
| 1 | Logic gate trainer (Purchased through College Fund) | Verification of logic gates |  |
| 2 | Transistor characteristics apparatus (Purchased through College Fund) | Study of input and output characteristics |  |
| 3 | Half wave, full wave & Bridge Rectifier Apparatus (Purchased through College Fund) | Study of different rectifiers |  |





Patkai Christian College (Autonomous)

Chümoukedima-Seithekema, B.P.O. Patkai- 797103, Chümoukedima District, Nagaland, India

Affiliated to Nagaland University
 Recognised by UGC under 2F & 12B of the UGC Act 1956 in 1988
 NAAC Accreditation: Grade B++ (Fourth Cycle)
 "A College with Potential for Excellence" // A Post-Graduate College

| Sl No | Instrument | Application | Image |
|-------|---|---|-------|
| 4 | Energy Band Gap Apparatus (Purchased through College Fund) | Study of energy band gap | |
| 5 | Gauss Meter (Purchased through College Fund) | To determine hall coefficient | |
| 6 | Plank's Constant apparatus (Purchased through College Fund) | To find Planck's constant value and work function | |





Patkai Christian College (Autonomous)

Chümoukedima-Seithekema, B.P.O. Patkai- 797103, Chümoukedima District, Nagaland, India

Affiliated to Nagaland University
Recognised by UGC under 2F & 12B of the UGC Act 1956 in 1988
NAAC Accreditation: Grade B++ (Fourth Cycle)
"A College with Potential for Excellence" // A Post-Graduate College

| Sl No | Instrument | Application | Image |
|-------|--|---|-------|
| 7 | BH Curve Apparatus (Purchased through College Fund) | To study hysteresis loop | |
| 8 | LDR Characteristics Apparatus (Purchased through College Fund) | To study LDR sensor | |
| 9 | LCR Resonance Apparatus (Purchased through College Fund) | To study series and parallel and to find Q factor | |





Patkai Christian College (Autonomous)

Chümoukedima-Seithekema, B.P.O. Patkai- 797103, Chümoukedima District, Nagaland,
India

Affiliated to Nagaland University




Recognised by UGC under 2F & 12B of the UGC Act 1956 in 1988

NAAC Accreditation: Grade B++ (Fourth Cycle)

"A College with Potential for Excellence" // A Post-Graduate College

RESEARCH FACILITIES

Name of Department: **Zoology**

| Sl No | Instrument | Application | Image |
|-------|---|--|--|
| 1 | Micro imaging system (Purchased through College Fund) | Cell imaging and capturing of image |  |
| 2 | BOD Incubator (Purchased through College Fund) | Culturing of bacteria and other microorganisms, waste water analysis |  |
| 3 | Incubator (Purchased through College Fund) | Cell culture, Biochemical studies |  |





Patkai Christian College (Autonomous)




Chümoukedima-Seithekema, B.P.O. Patkai- 797103, Chümoukedima District, Nagaland,
India

Affiliated to Nagaland University

Recognised by UGC under 2F & 12B of the UGC Act 1956 in 1988

NAAC Accreditation: Grade B++ (Fourth Cycle)

"A College with Potential for Excellence" // A Post-Graduate College

| Sl No | Instrument | Application | Image |
|-------|---|---|--|
| 4 | Centrifuge (Purchased through College Fund) | Separation of liquids or fluids based on density, biomolecules separation |  |
| 5 | UV-Vis Spectrophotometers (Purchased through College Fund) | Study properties of biomolecules, identify compounds, determine concentration of biomolecules in solution |  |
| 6 | Water Bath (Purchased through College Fund) | Incubation of samples at constant temperature, cell culture, melting substances |  |









Patkai Christian College (Autonomous)

Chümoukedima-Seithekema, B.P.O. Patkai- 797103, Chümoukedima District, Nagaland,
India

Affiliated to Nagaland University
Recognised by UGC under 2F & 12B of the UGC Act 1956 in 1988
NAAC Accreditation: Grade B++ (Fourth Cycle)
"A College with Potential for Excellence" // A Post-Graduate College

| Sl No | Instrument | Application | Image |
|-------|---|---|--|
| 7 | Turbidity / Colorimeter (Purchased through College Fund) | Measure haziness of liquid, water quality |  |
| 8 | Magnetic Stirrer (Purchased through College Fund) | Mixing of liquids, preparation and separation of samples |  |
| 9 | Digital pH Meter (Purchased through College Fund) | Measure pH of water, solutions, buffers etc to evaluate acidity or alkalinity |  |
| 10 | Transilluminator (Purchased through College Fund) | To visualize DNA and proteins and determine their size |  |





Patkai Christian College (Autonomous)

Chümoukedima-Seithekema, B.P.O. Patkai- 797103, Chümoukedima District, Nagaland,
India

Affiliated to Nagaland University

Recognised by UGC under 2F & 12B of the UGC Act 1956 in 1988

NAAC Accreditation: Grade B++ (Fourth Cycle)

"A College with Potential for Excellence" // A Post-Graduate College

| Sl No | Instrument | Application | Image |
|-------|---|--|-------|
| 11 | Electrophoresis Unit (Purchased through College Fund) | Separate and analyze biomolecules based on their size and charge | |
| 12 | Binocular Research Microscope (Purchased through College Fund) | Study cells, tissues and microorganisms and other microscopic structures | |
| 13 | Stereo microscope (Purchased through College Fund) | Used in dissections, observing model organisms and other small organisms | |





Patkai Christian College (Autonomous)

Chümoukedima-Seithekema, B.P.O. Patkai- 797103, Chümoukedima District, Nagaland,
India

Affiliated to Nagaland University
Recognised by UGC under 2F & 12B of the UGC Act 1956 in 1988

NAAC Accreditation: Grade B++ (Fourth Cycle)
"A College with Potential for Excellence" // A Post-Graduate College

DEPARTMENT OF MATHEMATICS

(Purchased through College Fund)



DEPARTMENT OF COMPUTER SCIENCE

(Purchased through College Fund)

