Components of Acceptable Geoscience Work Experience and Professional Development

The following criteria are designed to provide guidance to candidates, employers and supervisor with respect to the experience expected of a geoscientist-in-training applying for professional registration. Acceptable geoscience work experience must include the application of the knowledge of geoscience principles and practice and should provide exposure to, or experience in the following broad areas: management, communication, and the social implications of geoscience. Assessment of the acceptability of the work experience is based on the extent to which the applicant's experience includes these areas which are outlined in the following sections. Further information on the definition of satisfactory experience can be found in *Experience Guideline 1 – Guideline on Work Experience Reporting for Members-in-Training, Supervisors and Mentors.*

1) Application of the Knowledge of Geoscience Principles and Practice

The skillful application of geoscience knowledge is essential to earning professional registration and licensure. To be accepted, a candidate's experience shall include active and responsible participation in the following aspects of geoscience:

a) geoscience training and familiarization;
b) technical geoscience experience;
c) development of geologic concepts (for example: preparation of reports concerning deposits of rocks, minerals or other naturally-occurring earth materials); and,
d) mapping and systematic geoscience evaluation (with specific reference to bedrock, unconsolidated earth materials and/or snow, ice, groundwater, surface water and constituents thereof);
e) identification of geologic hazards and risk to the public and the environment.

2) Management of Geoscience

Management in geoscience includes the supervision of staff, project leadership, budgeting and the socially responsible application of geoscientific principles and practices. Candidates must be able to document reasonable progression toward increasing management involvement and responsibility over time.

3) Social Implications of Geoscience

The practice of geoscience has significant impact on the public in the fields of public and environmental safety, industry, finance and education. Candidates should become aware of the geoscientist's role in society and the social impact of projects in which they are involved. They should understand the role of the geoscientist from these points of view including environmental, economic and the advancement of knowledge. The objective is to foster an awareness of the geoscientist's professional responsibility to guard against conditions which threaten life, property or the environment and to call such conditions to the attention of those responsible.

4) Communication Skills

During the training period, candidates should be required to communicate effectively with superiors, co-workers, government regulators, clients and the general public. They should become proficient in the written and oral presentation of geoscience from daily record-keeping to major reports.

Acceptable Professional Development Courses and Seminar Topics for Geoscientists-in-Training

1. Advanced technical skills
2. Economics of exploration and exploitation
3. Communications
4. Resource development law
    - Land leasing
    - Land acquisition
5. Self development
6. Promotion of earth science awareness through programs such as:
    - EDGEO
    - Science Fair judging
7. Environmental factors - implications of resource development