

TUESDAY, AUGUST 23, 2005, A.M.

**SESSION 20: INTERNATIONAL SYMPOSIUM ON RECRUITMENT AND
EARLY CAREER DEVELOPMENT PROGRAMS**

RECRUITMENT, RESOURCES, TRAINING AND PROGRAMS

Sponsor(s): Management Section, The Metallurgical Society of CIM

Room: Neilson 3

Chair(s): M.G. KING, Noranda Inc./Falconbridge Ltd.

PAPER 20.1—8:30

RECRUITMENT AND EARLY CAREER DEVELOPMENT PROGRAMS.

A. DE LUISA and M.G. KING, Noranda Inc./Falconbridge Ltd., Canada

In 1997 Falconbridge Ltd. realized it was faced with a critical shortage of incoming high quality metallurgical and mineral processing engineers for its operations. The decision was made to institute an Engineering in Training (EIT) program to recruit and rapidly develop talented young engineers for the Company. Some 8 years later the program has been a great success and there is now a significant population of such engineers working in operations. In addition, with the merger of Noranda and Falconbridge, the EIT program has been expanded to cover both companies. Retention rates have been extremely high and the program is now being used as model for other professional groups within the Company. This paper outlines the criteria for entry into the program, the assignments and expectations of the engineers while they are in the program, the mentorship provided and the follow up by the Company as the engineers move to career track positions in operations.

PAPER 20.2—9:00

RECRUITMENT AND DEVELOPMENT OF METALLURGICAL TALENT.

M.E. CHALKLEY, J.L. HENNIG, M. HASSEN, M. FERMANDELL and S. ASSEN, Sherritt International Corporation, Canada

With the baby boomer generation on the verge of retirement, organizations are faced with the daunting task of recruiting for key positions from a shrinking labour force. This has led to innovative recruitment practices, which include partnership with engineering firms and educational institutions. The influx of new employees, increased demands on existing employees and shifting job duties have created a skills gap for employers. It is no longer sufficient to recruit for skills. We must continue to develop employee skills through an accelerated structured employee development plan, which includes mentorship, rotational assignments, co-op positions and formalized training with partnered educational institutions. Current recruitment practices and development plans are investigated in this paper.

PAPER 20.3—9:30

TECHNOLOGY RESOURCE DEVELOPMENT AT DOFASCO.

T. MACPHERSON and T. O'HALLORAN, Dofasco Inc., Canada

In the late 1990's Dofasco's technology division faced a number of issues regarding the attraction and retention of technical people. In response a team was put in place to design and implement programs to address these issues. The results was:

- redesigned approach to recruitment
- introduction of a new employee orientation program
- development of a mentoring program for new employees
- implementation of a rotational program
- investigation of a knowledge management program
- implementation of a technical needs assessment
- development of a technology framework and supporting curriculum.

COFFEE BREAK—10:00-10:30

PAPER 20.4—10:30

BARRICK GOLD CORPORATION'S ENGINEERING IN TRAINING PROGRAM.

I. MULLANY and C. BOSTICK, Barrick Gold, Canada

Barrick Gold Corporation is developing a new generation of gold mines, touted as being one of the most significant new pipelines in the gold industry. By 2007, the mines are expected to drive the company's growth profile to a target of 6.8 to 7.0 million ounces of gold production. This figure represents a 40% increase over 2004's production

level. As Barrick builds new mines and plans for long-term growth, it is increasingly important to develop and retain our talent on a global basis. In such Barrick Gold Corporation is developing and implementing an Engineering in Training Programs. We see this program as a win on many fronts.

Provides relevant, challenging development opportunities for many people deployed in the technical functions.

Develops leaders in the nations in which we operate.

Thirdly, it enables us to transfer knowledge and skill from experienced technical experts, to the technical leaders of the future.

Each of these advantages contributes to the overall goal of reaching our growth targets beyond 2010.

PAPER 20.5—11:00

THE TECHNICAL RECOGNITION PROGRAM IN THE AIR LIQUIDE GROUP.

A. MCCORD, Air Liquide Canada Inc., Canada

The success of industrial firms is often linked to the innovative skills of its technical specialists. This is particularly true in the metallurgical sector in Canada. At the same time, interest in metallurgical careers is decreasing, a reflection of a general trend in technical careers in the industrial world. Compared to commercial or managerial functions, technical functions are often highly industry sector specific. Hence the ability to assure a high level of competency over time requires a long-term plan and commitment to developing technical and rewarding competency from within. To respond to this challenge, some industrial companies have created Technical Recognition Programs (TRP) to provide more formal and systematic development and recognition of technical contributors. This paper describes the main components of Air Liquide's TRP, how it functions, and its impact on AL's ability to attract and develop world-class technical talent. In particular, it addresses the career paths open to technical experts, how they are evaluated for progression, how AL supports and develops their competencies, and how technical leadership positions are situated in the company. Finally, it addresses how these technical roles have evolved in AL to reflect this new status.

PAPER 20.6—11:30

A NEW PARADIGM FOR GRADUATE MATERIALS EDUCATION.

S.A. SHIPILOV, University of Calgary, Canada

The rapid changes on the materials scene are evident to all active members of the profession. During the next 20 years, much of our mechanical infrastructure will require replacement. Many materials-related problems are beginning to be addressed in some of today's undergraduate engineering programs, but many working engineers lack sufficient formal training in the area and have to resort to gaining their training while on the job. What can be done about these issues? First of all, the academic community needs to rethink the way it organizes graduate education objectives. A new paradigm for graduate materials education needs to be emerged to address real needs of industry and society. The paradigm increasingly requires a multidisciplinary, collaborative approach to research; there should be exposure to practical problems and situations. It seems that new graduate-level programs aimed at the continuing education of engineers who have already spent several years in industry should be a priority in graduate education. In addition, new post-master's programs should be designed to provide individuals who want to undertake in-depth study in their field beyond a master's degree, but who want to concentrate on applied subject material rather than on basic research, with an advanced study in preparation for pragmatic application. We need also to increase emphasis on processing in new master's and doctoral programs that would have industrial on-site components for each student.