With the beginning of the current academic year, the Institute included in its curriculum, for the first time, a course in labor problems open as an elective to seniors and graduate students.

The principal reason for this expansion is the fact that to a steadily increasing extent graduates of the Institute, in its various engineering departments, have been moving into positions of general administrative responsibility. And as industry is now demonstrating a definite trend toward the selection of scientifically-trained men for such administrative posts, the young engineer of today is likely to find himself the business executive of tomorrow. He should fit himself to be something more than an engineer.

Accordingly, it has become important that graduates of the Institute be made familiar with the fundamental concepts and the developing technique of personnel administration, collective bargaining, and the constant interplay of those social, economic and political forces which operate within the area of human relationships in industry. As the whole problem of establishing and maintaining "right" human relationships in industry has grown enormously in significance during recent years, the need for appropriate academic training in this field has become clearly manifest. Virtually all the engineering graduates of the California Institute go into positions where they are almost immediately brought into contact with this problem of employer-employee relationship in some of its manifold phases.

Labor relations have increasingly become the subject of state and federal regulation and the effects of recent legislative acts, to mention only the National Labor Relations Act, the Fair Labor Standards Act, and the Social Security Act, have made the subject one of prime importance from a social and a political standpoint. In other words, the whole matter of industrial labor relations has moved to a position of such importance as to merit, if not actually require, inclusion in the Institute curriculum.

SIXTH COLLEGE

The California Institute of Technology is the sixth of the North American universities and colleges to create a specialized Industrial Relations Section. Some fifteen years ago Princeton University organized such a section along relatively modest lines which have since expanded. Within the past five years Massachusetts Institute of Technology, University of Michigan, Stanford University and Queen's University, Toronto, have likewise organized an Industrial Relations Section. Wisconsin University plans the inclusion of such a course next year and doubtless other universities will in a similar manner, adopt courses for a specialized study of this very significant problem.

The inauguration of the Industrial Relations Section at Caltech was the result of a recommendation following a special study by the following committee: Dr. R. A. Millikan, Dr. Edwin F. Gay, Mr. William C. McDuffie, Dr. Max Mason, Mr. Arthur H. Young, and Dr. William B. Munro, Chairman.

The work during the current year has embraced four major activities: the development of the curriculum; the building up of a library; the development of contacts with major industrial executives, and industrial relations technicians in the Los Angeles area; and the undertaking of research and field studies in labor problems.

The instructional activities of the Industrial Relations Section include, first of all, a general course (listed as Economics 48 a, b, c) which is open to senior undergraduates; this course offers a general introduction to the study of industrial relations, with stress laid on those aspects of the subject most essential to the engineer's understanding of industrial labor.

A further course (listed as Economics 110a, b) which is designed for graduates, is limited to twelve students chosen from the Business Economics Course on the basis of demonstrated interest and ability in the special field of industrial relations. Conducted by the seminar method, it encourages individual investigation of special problems and provides training in research methods and the use of pamphlet material. In addition to these specific courses, occasional lectures on various phases of industrial relations are included in Economics 100, Professor H. N. Gilbert's graduate course in Business Economics.

It will be seen from the foregoing that the courses might well be regarded as adjuncts to a modern engineering course rather than as a specific preparation for the profession of industrial relations management. Instruction during the current year has been in charge of Dr. Dwight L. Palmer, loaned during the first half year through the courtesy of Massachusetts Institute of Technology's Industrial Relations Section, and Dr. Everett D. Hawkins, likewise on leave of absence through the courtesy of Mount Holyoke College, and Mr. Arthur H. Young, who has recently become a resident of California after his retirement from more than thirty years of active service in industrial personnel work. It is expected that prior to the opening of the next academic year, the instructional staff will be reorganized on a permanent basis and a later announcement of the arrangements in this respect will be made on completion thereof.

OUTSIDE LECTURERS

The instructional work of the regular staff members has been supplemented by special lectures of outstanding industrial executives, personnel managers, labor leaders and public officials. Although called Visiting Lecturers as a convenient appellation, these men have not been asked merely to give lectures; the
main purpose of their coming is to afford the students the opportunity to meet them and obtain sidelights on many matters which lecturers would not give.

A special library of materials relating to industrial relations may be regarded as absolutely necessary equipment for the teaching of the subject. The changes in concept and techniques in labor management evolve so rapidly as to make it extremely difficult, if not impossible, to develop adequate textbook material. Reliance must therefore be had on the more useful and timely books in various phases of labor relations, the accumulation of labor and trade periodicals, reports, bulletins and pamphlets published by the federal and state departments of labor, by the International Labour Office, as well as by labor unions, employers' associations, industrial research institutions, and by technical and trade groups.

The library is rapidly collecting a file of collective bargaining contracts which are classified and indexed for ready reference by those who desire to consult them. Included in the library files are such publications as employee rule books, manuals for safety, job analysis studies, employee rating plans, house organs, materials relating to profit sharing, unemployment insurance, thrift and home-owning plans, and special statistical studies furnished by employers. Also included are copies of the constitutions, by-laws, contracts, convention proceedings, labor journals, pamphlets and reports furnished by trade unions in every branch of industry.

All of this material, rapidly growing in volume, is catalogued and cross-indexed to make it quickly and easily accessible, not only to students and research workers but to industrial relations executives, labor leaders, or any others who may be desirous of obtaining first-hand and authoritative information.

POSSIBLE ENLARGEMENT

During the short interval in which the Industrial Relations Section has been functioning, there have been numerous inquiries concerning its availability to business and professional men, as well as to employers of small groups who would like to acquire some knowledge in the field of personnel administration by attending lectures on the subject, or by enrolling in seminars, or even by following a program of reading. Several groups of junior employees in the personnel departments of Los Angeles business concerns have made a definite request for an extension course in personnel administration. While extension work, available to persons engaged in industry, was not contemplated in the original plan of industrial relations work at the California Institute, some such enlargement of the program will be given consideration if there appears to be sufficient demand for it.

Financial support for this new enterprise at the Institute has been provided in part by a generous grant from the Earhart Foundation but in larger part by contributions from some fifty industrial concerns and labor organizations in California. The contributors are widely diversified; their range includes public utilities, oil companies, aircraft manufacturers, building contractors, banks, newspapers, as well as representatives of the steel, cement, automobile, electrical, rubber, textile, hardware and various other industries. These pledges of support, which amount to more than $20,000 per year over a five-year period, have been given without any restrictive conditions whatever. They have all been motivated by the sole purpose of helping the Institute to carry forward, through its new Industrial Relations Section, the activities which have thus briefly been described.
1 Industrial relations in emerging economies Susan Hayter. 2 Labour relations and inclusive growth in India: New forms of voice Uma Rani and Ratna Sen. 3 Industrial relations and inclusive development in South Africa: A dream deferred? Susan Hayter and Nicolas Pons-Vignon. 4 Industrial relations and inclusive growth in Brazil: The swinging pendulum Janine Berg and Eduardo Schneider. This chapter begins with a brief overview of the theoretical perspectives that inform the study of industrial relations (section 1.2). It then examines empirical literature on industrial relations in developing economies (section 1.3). Section 1.4 considers the insights that emerge from the comparative analysis of the country studies in this volume. In this paper we examine the geographic patterns of employment growth and employment polarization in small and medium-sized cities (SMCs) in Denmark during the rise of the new economy. The geography of employment polarization in Danish cities is examined using register-based employment data on occupations and wages divided into the public and private sectors in the period 1993–2006; it therefore ... We assess the reform programme in the UK, which has involved substantial reorganization of public services and increasing involvement of the private sector. Reforms focus on the improvement of incentives; but while incentives are critical, the special characteristics of...