1. Record Nr. UNINA9910782073903321 Autore Gingras Yves <1954-> **Titolo** Physics and the rise of scientific research in Canada [[electronic resource] /] / Yves Gingras; translated by Peter Keating Montreal, : McGill-Queen's University Press, c1991 Pubbl/distr/stampa **ISBN** 1-282-85551-4 9786612855511 0-7735-6281-8 Descrizione fisica xii, 203 p.: ill.;; 24 cm Disciplina 507/.2071 Research - Canada - History Soggetti Science - Study and teaching (Higher) - Canada - History Physics - Canada - History Federal aid to research - Canada Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Note generali Translation of: Les origines de la recherche scientifique au Canada. Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Front Matter -- Contents -- List of Figures and Tables --Acknowledgments -- Introduction -- Establishing Research -- From Teaching to Research -- Finding Resources -- Growth and Diversification of Research -- Reforming Institutions -- Adjusting the Royal Society of Canada -- The Birth of the Canadian Journal of Research -- Changing Definitions -- In Search of a Collective Voice --Profession or Discipline? -- Representing the Discipline -- Conclusion -- Statistical Appendix -- Notes -- Index The teaching of engineering and a change in liberal arts curricula, both Sommario/riassunto stimulated by industrial growth, encouraged the creation of specialized courses in the sciences. By the 1890s, Gingras argues, trained researchers had begun to appear in Canadian universities. The technological demands of the First World War and the founding, in 1916, of the National Research Council of Canada (NRC) accelerated the growth of scientific research. The Transactions of the Royal Society of Canada could no longer publish everything submitted to it because of

the disproportionately large number of research papers from the fields of science. In response, the NRC created the Canadian Journal of

Research, a journal specifically dedicated to the publication of scientific research. By 1930, a stable, national system of scientific research was in place in Canada. Following the dramatic increase in the national importance of their disciplines, scientists faced the problem of social identity. Gingras demonstrates that in the case of physics this took the form of a conflict between those who promoted a professional orientation, necessary to compete successfully with engineers in the labour market, and those, mainly in the universities, who were concerned with problems of the discipline such as publication, internal management, and awards. Physics and the Rise of Scientific Research in Canada is the first book to provide a general analysis of the origins of scientific research in Canadian universities. Gingras proposes a sociological model of the formation of scientific disciplines, distinguishing the profession from the discipline, two notions often confused by historians and sociologists of science.