# NATIONAL UNIVERSITY OF SINGAPORE



DIRECTORY OF CURRENT RESEARCH 1985-6

### NATIONAL UNIVERSITY OF SINGAPORE

DIRECTORY OF CURRENT RESEARCH

#### Introduction

The concentration of researchers in an institution such as the University makes it an important resource centre for a wide range of R & D activities.

However, because of the rapid expansion of the faculties, there is a growing need for more effective dissemination of information even within the University itself. This booklet is published with a view to foster interfaculty co-operation in multidisciplinary research by disseminating information on research activities currently undertaken by the University's teaching staff. It is hoped that it will help staff to identify common areas of research interests so that expertise in different disciplines may be pooled and unnecessary duplication of research effort avoided. In the process, funds, facilities and time will be more likely to be put to optimum use.

Furthermore, as one of the University's objectives is the promotion of closer ties with Industry, it is hoped that this directory of current research activity will serve as a means of generating increased industrial awareness of and interest in the University's resources. This publication should also prove useful to government ministries and other research bodies. For maximum impact, this directory is updated annually.

If more information is required, please address enquiries to:

The Director
University Liaison Office
5th Floor, Administration Building
National University of Singapore
Kent Ridge, Singapore 0511

He can also be reached at Tel: 7722436.

### **CONTENTS**

FACULTY OF ACCOUNTANCY AND BUSINESS ADMINISTRATION	
School of Accountancy School of Management	
FACULTY OF ARCHITECTURE AND BUILDING	
Architecture	22
FACULTY OF ARTS AND SOCIAL SCIENCES	
Chinese Studies	30
√ Economics and Statistics	
English Language and Literature	
Geography	.49
History	.52
Japanese Studies	.55
Malay Studies	
Philosophy	
Political Science	
Social Work	
Sociology	65
FACULTY OF DENTISTRY	
Operative Dentistry	69
Oral Surgery	
Prosthetic Dentistry	72
FACULTY OF ENGINEERING	
Chemical Engineering	73
Civil Engineering	
Electrical Engineering	83
Industrial and Systems Engineering	
	90
FACULTY OF LAW	97

FACULTY OF MEDICINE	
Anatomy	10.
Biochemistry	106
Medicine	110
Microbiology	119
Obstetrics and Gynaecology	123
Orthopaedic Surgery	133
Paediatrics	137
Pathology	141
Pharmacology	143
Physiology	145
Psychological Medicine	147
Social Medicine and Public Health	148
Surgery	152
Botany	158 163 166 171 172 179
COMPUTER CENTRE	182
ENGLISH LANGUAGE PROFICIENCY UNIT	184
INSTITUTE OF SYSTEMS SCIENCE	186
NAME INDEX	189
KEYWORD INDEX	200

### FACULTY OF ACCOUNTANCY AND BUSINESS ADMINISTRATION

#### SCHOOL OF ACCOUNTANCY

Professor

**Hopkins**, **Roger William**, PhD MCom (Hons), BCom Cant., FCA, CMA (N.Z.)

The accounting process, economic development and productivity Accounting theory and the standard setting process Financial management in the decision process Accounting education and economic development

### Associate Professors

Fong See Weng, Dip Acc Perth, MCA Well., BEcon Q'ld., ASA
Financial accounting theory and practice
Reporting and disclosure practices of listed companies in Singapore

Gan Tin Hua, FCA, (I.C.A.), ATII London
Financial reporting practices of Singapore companies
Accounting for reserves
Accounting for taxes under different systems of taxes
Taxation law and practice

\*Han Kang Hong, BSc (Econ) Hons Lond., FCMA, AASA, CPA, ACIS, AIB, RAS, BBM

Application of mathematical programming and control theory to problems in accounting and finance
Productivity measurement
Current issues in accounting and finance

Windle, IP, MA BA Camb., FCA, RAS

Problem areas in accounting for property companies Accounting for inflation and price changes Value-added statements

<sup>\*</sup>Head of Department

#### Senior Lecturers

Andrew, Brian, BCom N'cle, MCom (Hons) NSW, B Leg S Macq., AASA, CPA

Taxation law and policy
Financial accounting theory
Form and content of published accounts
Content and usefulness of funds statements

Ang Kong Beng, BCom Nan., MBA Br. Col., ACMA

Empirical studies of cost and management accounting practices in small businesses

Austin, Lloyd, BCom MCom Auckland, ACA N.Z.

Commercial securities: legal and accounting issues
Joint ventures: accounting, finance and legal issues
Project finance: control arrangements, sources of finance
Financial and credit evaluation (for lenders)

Chong, Sebastian Y S, MEcon Syd., BAcc (Hons) Sing., RAS
Related party transactions
Income smoothing
Audit reports
Legal implications of accounting standards
Case study approach to teaching

Choudhury, Nandan, BCom (Hons) Calc., MSc (Finance) Lond., FCA Incentives and control in decentralised firms Human information processing in accounting Cognitive resources to management accounting systems

Dhawn, S L, AAIA Eng., ATII London., Assoc. Inst. of Taxation, Aust. Singapore income tax law and practice

Ganeshanathan, R O, BSc (Hons) Ceyl., FCA, RAS Microcomputer-based applications Security of computer systems

Ghosh, B C, BCom Calc., MPhil Lough, FCMA, FCCA, RAS, ACIS, FICWA

Management control Strategy building Lease-financing Accounting education

### Hou Kok Kee, BCom N.Z., MCom Well., ACA, RAS

The uses of investment formula

The evaluation of investment performance

The performance of low PE stocks in Singapore and Malaysia

Company taxation in Singapore

Tax incentives

## Hwang Soo Chiat, BAcc (Hons) Sing., MEcon Monash, ACMA, RAS Effects of international accounting on accounting development in Singapore

Use of expectancy theory model in public accounting firm

### Kasiraja, N, LLB (Hons) Ceyl., LLM Harv, and Stan., Attorney-at-Law, Sri Lanka

Commercial transactions

Contracting by electronic means

Computer and the law

Financial and banking law

### Lee Meng Hye, BA (Hons) Econ, Malaya., MBA Br. Col., CA (NZ), Member M'sian Inst. of Acct.

A comparative study of the versatility profile of the accounting professions in the ASEAN/Pacific region

A study of the information content of company prospectus based on selected cases

A study of the impact of computerisation on the management information system of companies in Singapore

### Leong Sheng Chow (Mrs), MCom NSW, BEcon Syd., AASA (Senior), ACIS, AAIM, RAS, MACPA

Disclosure in company accounts International and local auditing developments

### Low Aik Meng, MCom (Hons) NSW, BAcc Sing., RAS

Accounting measures of productivity

Construction corporate failure prediction model

Financial reporting in Singapore

### Oliga, John Christian, MA Sheffield, ACCA, ACMA, ACIS, FCIS, FCMA, FCCA

Control in human organisations and critical social theory

Development issues in accounting and finance

Small business and small-scale industry in developing countries

Cybernetics and general systems theory

Ong Poh Wah (Mrs), MSc Lond., BAcc (Hons) Sing., RAS Computerised accounting systems for small businesses Accounting for management planning and control Financial management

Perampalam, V M, BSc (Hons) Lond., ACA, FCA, RAS Legal aspects of accounts Theory of auditing

Pointon, Leo, LLM Lond., MA BA N.Z., FBIM, AFNZIM, MIIM, ACIArd. International tax planning and double taxation agreements

Tax aspects of residence and domicile

Law and practice of income tax in Saudi Arabia

Rao, Venkata K, BCom (Hons) Andhra, DisSysMgmt Bom., FICWA, MBCS Lond.

Decision support systems and knowledge-based information systems Policy and management issues in MIS

Computer graphics in MIS

Shenoy, George T L, MCom Madras, LLB LLM Bombay, PhD Lond., Advocate

Commercial and industrial law, constitutional law, jurisprudence

Soh Suwe, MCom BCom Nan., RAS Financial accounting and reporting Portfolio analysis

Tan Teck Meng, MCom (Hons) NSW, BAcc Sing., RAS, AASA (Senior), MBIM, AAIM, ACIS

Segmental reporting

Employee information in corporate reports

Wilkins, Trevor A, MCom (Hons) NSW, BCom DipEd Q'ld, AASA (Senior), AAUQ, ACIS, AAIM

Management accounting and management control systems

Advanced financial accounting and reporting

Behavioural accounting research into the impact of alternative accounting methods and differential disclosure on financial statement users' judgements and decisions

Human information processing

#### Lecturers

- Ambanpola, K B, BSc (Econ) Lond., FCA (UK), ACIS, ACMA, ATII Accounting for inflation and price changes International auditing standards
- Chan Sow Lin (Miss), BAcc (Hons) Sing., MSc Aston, RAS Management information systems
- Chan Wang Hon, BAcc (Hons) Sing., SM MIT Capital budgeting Use of microcomputers in management
- Chan Yoke Kai, BAcc (Hons) Sing., FCMA, RAS

  Economic consequences of accounting techniques (e.g. of asset revaluations)
- Chew Swee Chung, Andrew, BA (Hons) Sheffield, MSc Lond., ACA-ICAEW
  Organisational control system
- Foo, Wendy (Mrs), BSc (Econ) (Hons) Lond., ACA, ICAEW, RAS, CPA (M)

Corporate finance Investment management

Goh Chye Tee, MCom (Hons) NSW, BCom (Hons) Nan., MBIM, RAS, AASA

Segment reporting in Singapore Disclosure of value added information by Singapore companies Evaluation of management accounting

Inkpen, Andrew C, BCom St Mary, CA Canada, MBA Ontario Accounting standards development Case research

Keller, Joseph, DCS BCL McGill, LLM LLB Dalhousie Commercial and corporate law International law Company winding up and liquidation Kwok C H, Branson, BCom MBA W. Aust., AAIM, AASA, Fellow of Taxation Inst. of Aust.

Information content of financial reports Efficiency of capital market

Lee, Marina F T (Mrs), BCom (Hons) Nan., MBA Melb., AASA (Senior), RAS

Financial accounting Business finance

Leong Kwong Sin, MCom Cant., BAcc (Hons) Sing., RAS Accounting information systems

Loh Lye Chye, Alfred, BAcc (Hons) Sing., MCom (Hons) NSW The usefulness of accounting numbers

Low S S, Richard, BCom MCom Cant., RAS, ACA (NZ), ACIS Financial accounting

Pang Yang Hoong, MEcon Monash, BAcc (Hons) Sing., RAS
Audit committees
Financial reporting and disclosure in financial statements

Seet, Eddy, BAcc (Hons) Sing., RAS Financial accounting Cost and management accounting

Steinberg, Eric Stanley, BA (Econ) Calgary, LLB Alberta, LLM London, Barrister and Solicitor of the Law Society of Alberta, Canada Commercial and consumer law Contract law Property law Administrative law

Tan J Y, Margaret (Miss), BCom NSW, DipBus Studies N'cle, MBA Adelaide, AASA (Senior), ACIS Accounting and management information systems

Tan Khoon Eng, BAcc (Hons) Sing., MBA Indiana, RAS Quantitative methods Decision support systems

### Tan P N, Angela (Mrs), BAcc (Hons) Sing., ACCA, RAS, FCCA

Tax incentives in Singapore and ASEAN countries
Tax planning
Double tax treaties
Taxation of financial institutions in Singapore

### Tan Wee Liang, LLB (Hons) Sing., LLM Cambridge

Company law Commercial law Banking law

### Tay Kok Leong, BAcc Sing., ACCA, ACMA, RAS

Corporate information management and external reporting

Tay Swee Kian, Catherine, LLM LLB (Hons) Lond., Barrister-at-law, of Lincoln's Inn, Advocate and Solicitor of Supreme Court of Singapore

A comparative study of insider trading laws and regulations in America, England, Australia and Singapore

Legal obligations of directors of ailing companies

Reforms: Modernising bankruptcy law in Singapore

Recent developments in bankruptcy and creditors' rights

#### Teo Chai Lian (Miss), ACA (UK), BAcc (Hons) Sing., RAS

The auditing profession in Singapore

The extent of use of statistical sampling by auditing firms in Singapore

### Ter Kah Leng (Mrs), LLM Brist., Barrister-at-Law, Advocate and Solicitor

A comparative study of insider trading laws and regulations in America, England. Australia and Singapore

The law and practice of company accounting

### Wan Chew Yoong, CPA (M), RA (M), MBA (IMEDE)

Business system and industry analysis

Corporate failures and turnaround

Transfer pricing and anti-avoidance provisions affecting MNCs

Zafrullah, H M, LLB (Hons) Sri Lanka, LLM Monash, Attorney-at-Law, Sri Lanka

Company contracts

Partnership law

Documentary letters

#### Senior Tutors

Chee Yam San, BSc (Econ) (Hons) Lond., ACA (ICAEW) Information system users Man-machine interface

Ellis, Nancy Ada, BComm (Hons) Queens, CA Canada, Member of Canadian Inst. of Chartered Accts, Alberta Inst. of Chartered Accts., RAS Management accounting Current value accounting

Foo See Liang, BComm Aust., ACA (England and Wales)
A survey of qualified annual reports in Singapore and Malaysia
Qualified audit opinion and auditor displacement: A Singapore
experience
The predictive power of a going concern audit qualification

The development of corporate financial reporting in Singapore and Malaysia

Hooi Den Huan, BSc (Hons) Brad., ACA (ICAEW), RAM, RAS
 Nature, extent and timing of qualifications in audit reports and their implications – in the local and international context
 Reporting and accounting practices of public, mixed and private enterprises in Singapore, and a comparative study of such practices to UK, USA and Malaysia

Khoo Teng Aun, BAcc (Hons) Sing., ICMA, RAS Management control systems

Koh Hian Chye, BAcc (Hons) Sing. Financial statement analysis

Lee Tong Kin, BAcc (Hons) Sing., RAS Financial accounting Financial analysis

Lim Kay Yi, Bernard, ACA (ICAEW), RAS Computer auditing Accounting and finance Information systems Low Kee Yang, LLB Sing., Advocate & Solicitor — Supreme Court of Singapore

Banking law Company law Commercial law

Neo Boon Siong, BAcc (Hons) Sing., RAS Management information systems

Ng Kah Hwa, MBA Sophia, BSc (Hons) Sing.
Money and banking
International finance
Macroeconometrics and statistics

Phoon Kok Fai, MSc Sing., BASc Br. Col. PEng Sing. Economics of information Empirical studies in finance

Singh, Jasbir D S, BAcc (Hons) Mal., ATTA-Acct Japan Human information processing International accounting — multinationals Foreign currency translation Behavioural accounting research

Sng Gek Neo (Miss), BAcc (Hons) Sing., RAS Human information processing in the accounting context

Soh Wai Lin, Christina (Miss), BAcc (Hons) Sing. Computer controls and security User involvement in the development of MIS Capital budgeting practices in Singapore

Tay, Cheryl (Mrs), BAcc Sing., RAS
Income tax and practice in ASEAN
Efficiency market theory financial information
Auditing

Tay Siok Wan, Joanne (Miss), BA (Hons) Liverpool, ACA (ICAEW)
Human information processing in financial analysis
Use and value of verbal protocols
Audit fees

Teo Pin Pin, Susan, BAcc (Hons) Sing. International accounting

Toh See Kiat, LLB Sing., Advocate and Solicitor, Supreme Court of Singapore

Commercial law Military law Company law

Yeo Hian Heng, Gillian, BAcc (Hons) Sing., ICMA, RAS Financial accounting

**Zubaidah Ismail**, BAcc (Hons) Sing., AIB Lond. Financial accounting

Visiting Professor

Ma, Ronald, BCom Lond., MBA Br. Col., FCCA, FASA, CPA Financial accounting theory and practice

Research Assistants

Ho Hin Dong, BBA Sing. Finance

Phuah, Judy (Mrs), B Arts (Can.), Dip in Computer Programming (Can.)
Computer Programming

SCHOOL OF MANAGEMENT

Associate Professors

Hsu Shih Chun, Paul, PhD MBA Mich., LLM N'tl Chenghi, BA N'tl Taiwan Consumer attitude and behaviour toward foreign products Channel problems arising from trade between market and controlled economics

Comparative management

Kau Ah Keng, PhD Lond., MA Lanc., BEcon (Hons) Malaya Buyer behaviour, marketing of services and the modernisation of small businesses

### Khin Maung Kyi, PhD Corn, MBA Harv, BCom Rangoon

Singapore managers: Social-psycho profiles of Singapore managers Managerial styles and organisational effectiveness

A multivariate study of selected firms in service industry with regard to determinants of their effectiveness

Case studies of ASEAN firms with reference to technological transfer and diffusion

### Macdonald, Ian, MA St Andrew's University

All aspects of strategic management, in particular the problems raised in highly diversified businesses
Singapore's business environment

Mehta, Subhash C, PhD Miss., MD PA Delhi, ICAME Stanford, BA Punj. Consumer behaviour Social marketing Marketing organisation

Pang Eng Fong, PhD Illinois, MA, BA (Hons) Sing.

Labour market developments in ASEAN countries

New forms of investments in ASEAN countries

Singapore multinationals

Putti, M Joseph, PhD Mich State, MBA Suffolk Identifying job similarity and differences in Singapore context

\*Tan Chin Tiong, PhD Penn State, MBA W III, BBA(Hons) Sing.
Consumer behaviour
Marketing
Cross-cultural consumer research

Tan Chwee Huat, PhD MBA MS Wis, BAcc (Hons) Prof, DiplAcctySing. Financial markets in Asia Human resource management practices in Asia Industrial relations in Singapore Public enterprise in Asia

Taylor, Keith, PhD Melb, MA Lond, BA (Hons) Manchester Vocational choice and career development throughout the life span Applications of psychology to personnel policies and practices Impact of social and technological change on work values

<sup>\*</sup> Head of Department

#### Senior Lecturers

Beck, John Edward, PhD Manchester, MA Leeds, BA(Hons) Sheffield

Management education and development — interpersonal skills,
organisational skills, learning from experience and learning, how to
learn, person-centred learning systems
Personal construct theory and repertory grids
Organisational change and development

Ch'ng Hak Kee, MPhil Warwick, MBA Hawaii, BCom Nan.

A study of the structure and performance of small industries in Singapore over the past 10 years

Project on small and medium business improvement in Singapore: Marketing factors (a second-year ASEAN project on small and medium business development)

Chau Ting, Theodora, PhD Wis., MSc Ed, MSc BSc N'tl Taiwan Effects of industrial automation Industrial productivity and worker motivation Attitudes of professional and executive women

Chong Li Choy, Dr Soz Wiss Bielefeld, Germany, MSocSci, BSocSci(Hons), BA Sing.

Development studies including international relations Multinational business and technology transfer Small business modernisation Human resource management

Chow Kit Boey, MSc BSc (Econs) Utah International trade Short-term forecasting

Chua Joon Eng, MBA Br. Col., BA(Hons) Sing., Cert Ed Sing.
Managerial and work values
Management education and training
Finance and investments

Donald, J S, PhD Delhi, MCom Alig., BSc Madr., AMIIE
Microcomputer-based accounting
Management information system for animal waste processing project