



OPERATIONS RESEARCH SOCIETY OF SOUTH AFRICA  
OPERASIONELE NAVORSINGSVERENIGING VAN SUID-AFRIKA

NUUSBRIEF  
NEWSLETTER

MAART 1974  
MARCH 1974

1. LIDMAATSKAP/MEMBERSHIP

Ons verwelkom die volgende nuwe lede:  
We welcome the following new members:

Vol/Full

S.M. Baker - W. Kaap/Cape  
E.J.A. Doble - W. Kaap/Cape

Mede/Associate

M.J. Abraham - Kitwe, Zambia  
B.J. Thomas - W. Kaap/Cape.

Die Vereniging het kontak verloor met die volgende lid. As iemand van sy huidige adres weet, sal hy dit asseblief aan die Sekretaris verskaf:

The Society has lost contact with the following member. If anyone is aware of his current address, will he please supply it to the Secretary:

D.F.R. Geden.

2. GESAMENTLIKE RAAD VAN NATUURWETENSKAPLIKE VERENIGINGS

Soos reeds aangekondig in die Nuusbrieff van April 1973, is ONSA 'n affiliaatlid van die Gesamentlike Raad van Natuurwetenskaplike Verenigings (G.R.N.V.), en word ons op die G.R.N.V. verteenwoordig deur die Suid-Afrikaanse Wiskunde-vereniging (S.A.W.V.). Die doelstellings van die G.R.N.V. is:

- (i) Om die algemene welvaart van die mensdom te bevorder deur die skeppende vermoë van natuurwetenskaplikes.
- (ii) Om samewerking onder sy lidverenigings en tussen verskillende natuurwetenskaplike vertakkinge in Suider-Afrika te bevorder.

- (iii) Om die natuurwetenskap en die natuurwetenskap as 'n beroep, te bevorder.
- (iv) Om 'n medium daar te stel vir die uitspreek en oordrag van natuurwetenskaplike menings oor sake van openbare belang wat binne die raamwerk van die Gesamentlike Raad se doelstellings val.

Die volgende raamwerk is deur die S.A.W.V. en die G.R.N.V. neergelê vir affiliasie deur die S.A.W.V.

- (i) Dat die S.A.W.V. hom bereid verklaar om enige vertoë of kommentaar van affiliaatlede aan die G.R.N.V. aan te bied en sover moontlik toe te lig, maar sonder die verpligting om dit te ondersteun.
- (ii) Dat die S.A.W.V. aanvaar dat stukke regstreeks deur die G.R.N.V. aan affiliaatlede gestuur word, en die S.A.W.V. in die algemeen nie inisiatief neem om kommentaar van affiliaatlede te verkry nie.
- (iii) Dat die S.A.W.V. geen beswaar het as affiliaatlede kommentaar of vertoë regstreeks aan die G.R.N.V. rig nie.
- (iv) Dat die S.A.W.V., wanneer die belangrikheid van 'n saak dit regverdig, met affiliaatlede oorleg kan pleeg om botsende sienings te probeer vermy.

Verder het die G.R.N.V. bekend gemaak dat affiliaatverenigings genooi kan word om by besprekings van 'n bepaalde saak wat hom in die besonder raak 'n verteenwoordiger op die vergadering van die Gesamentlike Raad te benoem.

Lede van ONSA sal deur ons nuusbrieff op hoogte gehou word van sake wat Operasionele Navorsing raak en wat by die G.R.N.V. ter sprake kom.

### 3. FUTURES STUDIES OF SOUTH AFRICA

The Bureau for Economic Research has created a specialized UNIT FOR FUTURES RESEARCH at its headquarters in Stellenbosch.

A comprehensive data bank is being created for the application of a variety of long-term forecasting techniques to the study of Southern African future. Dynamic modelling is likely to feature prominently in the battery of techniques employed, and output from the group will be of great interest to the O.R. community in the country.

Members who would like further information on the work and objectives of the unit may write to:

Dr. B.J. du Toit,  
Unit for Futures Research,  
Bureau for Economic Research,  
STELLENBOSCH.  
7600

At the same time research activity is proceeding in the Department of Applied Mathematics, Pretoria University, also on the application of dynamic modelling in long-term prediction.

4. TAKNUUS/CHAPTER NEWS

4.1 Pretoria

At the Annual General Meeting of the Chapter held on 6 March, the following chapter committee was elected:

Chairman	:	T.J. Stewart
Secretary	:	Miss N. Beeton
Treasurer	:	V.A. Shaw
Additional Members	:	J.W. Grobbelaar Prof. G. Wiechers.

4.2 Weskaap/Western Cape

'n Vergadering van die tak is gehou op 5 Maart 1974 by die Universiteit Kaapstad. Prof. G. Geldenhuys (Departement Toegepaste Wiskunde, U.S.) het gepraat oor "Operasionele Navorsing in die Pluimveebedryf". Die algemene jaarvergadering, wat net na die gewone vergadering plaasgevind het, is deur 20 lede bygewoon. Die komitee vir 1974-75, wat by dié geleentheid gekies is, is as volg saamgestel:

Voorsitter	:	Mnr. J.C. Lawton (Mobil)
Onder-voorsitter	:	Mnr. J. MacKenzie (Foschini)
Sekretaris	:	Dr. P. Fourie (Departement Toegepaste Wiskunde, U.S.)
Tesourier	:	Mnr. K.J.H. Jager (Sanlam)
Addisionele Lede	:	Prof. J.D. Hampton (Department of Business Science, U.C.T.) Mnr. A.H. Money (Department of Mathematical Statistics, U.C.T.) Mnr. J.F. Hofmeyr (Caltex)

The following notification of meeting was received by the Editor, and is included in the Newsletter for information of other members although by the time the Newsletter appears, the meeting will have come and gone:

There will be a meeting of the chapter at 16h30 on Thursday, the 28th of March, at the Graduate School of Business, University of Cape Town.

The speaker will be Professor V.E. McGee, of the Amos Tuck Graduate School of Business, Dartmouth College, U.S.A., and presently visiting professor at the Graduate School of Business, U.C.T. Professor McGee will discuss methods of analysing large volumes of data using various techniques

of Multivariate Analysis such as Cluster Analysis, Factor Analysis and Multidimensional Scaling.

Professor McGee is an entertaining and knowledgeable speaker and the topic will be of interest in today's business environment, where researchers often have to analyse large volumes of data in considerable detail.

It is expected that the meeting will adjourn to the Glendower Hotel at approximately 18h00, where further discussion will take place.

(No doubt a well oiled and fluid discussion! - Ed.)

#### 4.3 Johannesburg

It has been reported that a joint meeting of the Chapter with the Investment Analysts Society, at which the speaker will be Mr. P. Kerbel, Investment Manager, U.B.S., is planned for April. The discussion will centre around quadratic programming in portfolio optimization.

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VACANCY FOR EXPERIENCED OPERATIONS RESEARCH ANALYST

Caltex Oil (S.A.) has a vacancy for an experienced Operations Research Analyst in its central O.R. department.

The O.R. department undertakes a wide variety of projects covering the whole spectrum of corporate activities. Typical problems that have been or are being tackled in the company are:

- Refinery cost optimization models
- major critical path network analysis
- plant scheduling model
- product distribution analysis
- long- and short-term forecasting models
- econometric studies.

Prospective applicants are assured of a stimulating career in a major company committed to the use of sophisticated techniques in the solution of its problems.

For further information telephone Mr. J. Miller, O.R. Manager, Caltex - Cape Town 41-0981 - or write to P.O. Box 714, Cape Town, 8000.



## OPERATIONS ANALYSTS

(ref. 73/58/290)

The *National Research Institute for Mathematical Sciences, CSIR*, has vacancies for persons with B.Sc. (Hons) or equivalent or higher degrees in Operations Research, with or without experience. Activities include theoretical research and development in decision theory, optimization theory and simulation techniques, and the application of operations research to a variety of problems emanating from the public and private sectors.

SALARY: Between R3 150 and R9 300 per annum. In addition, staff members receive a pensionable allowance of 15%, plus a non-pensionable allowance of 2½% (males) and 1½% (females). The commencing salary is determined according to qualifications and applicable experience. Promotion is made according to individual merit.

### OPPORTUNITIES FOR FURTHER STUDY :

Employees are encouraged to obtain higher qualifications. Support is rendered financially or by assigning individuals to projects within the research programme of the Institute which are suitable for investigations leading to a higher degree.

### FRINGE BENEFITS :

Up to 39 days leave per annum; offices close between Christmas and New Year; generous sick leave; five-day week; pension, group insurance and medical aid scheme; holiday bonus; 100% housing loan and subsidy on repayments on housing loans.

Apply to the Director, *National Research Institute for Mathematical Sciences, CSIR, P.O. Box 395, Pretoria 0001. (REF. 73/58/290).* Application forms may be obtained from this address (telephone 74-6011 ext. 3039) or from the CSIR's regional offices in Johannesburg, Cape Town, Bloemfontein, Durban, Port Elizabeth and Windhoek.



## OPERASIONELE ANALISTE

(verw: 73/58/290)

Die *Nasionale Navorsingsinstituut vir Wiskundige Wetenskappe*, WNNR verlang persone met B.Sc. (Hons) of gelykwaardige of hoër kwalifikasies in Operasionele Analise, met of sonder ervaring. Die werk behels teoretiese navorsing en ontwikkeling in verband met beslissingsteorie, optimerings-teorie en simulasietegnieke, asook die toepassing van operasionele analise op 'n verskeidenheid probleme uit die openbare en private sektor.

SALARIS: Tussen R3 150 en R9 300 per jaar. Alle personeel ontvang ook 'n pensioendraende toelae van 15%, plus 'n nie-pensioendraende toelae van 2½% (mans) en 1½% (dames). Die aanvangsalaris word bepaal na gelang van kwalifikasies en toepaslike ondervinding. Vordering geskied volgens individuele meriete.

STUDIEGELEENTHEDE : Werknemers word aangemoedig om hulle verder in hul vak te bekwaam. Enersyds word geldelike hulp verleen en andersyds kry die betrokke personeellede die geleentheid om aan geskikte projekte binne die navorsingsprogram van die Instituut deel te neem met die oog op die verwerwing van hoër kwalifikasies.

BYVOORDELE : Tot 39 dae verlof per jaar; kantore sluit tussen Kersfees en Nuwejaar; ruim siekteverlof; vyfdaagse werkweek; pensioenskema, groepversekeringskema en mediese hulpfonds; vakansiebonus; 100%-huislening en subsidie op huisleningterugbetalings.

*Rig aansoeke aan die Direkteur, Nasionale Navorsingsinstituut vir Wiskundige Wetenskappe, WNNR, Posbus 395, Pretoria 0001. (VERW: 73/58/290). Aansoekvorms is verkrygbaar by hierdie adres (telefoon 74-6011 bylyn 3039) of by die WNNR se streekkantore in Johannesburg, Kaapstad, Bloemfontein, Durban, Port Elizabeth en Windhoek.*