# **HISTORY OF THE SOUTH AFRICAN COAL PROCESSING SOCIETY 1967-1995**

(first draft) -COMPILED BY D W HORSFALL, SHELL PROFESSOR OF COAL STUDIES, UNIVERSITY OF THE WITWATERSRAND

#### Special Acknowledgement

## Mr A D (Tony) Walters

Tony joined me as Technical Assistant at Anglo in about 1971; he rapidly became associated with the SACPS, serving as secretary for some four years from 1972. He early recognised that the Society, then only 4 years old, was rapidly acquiring both a history and reputation; both of the best kind. He said that the archives should be collected and collated, and proceeded with a great deal of effort to do just that. When acting as archivist he acted as archivist, and no long service man at the Bodleian could have managed a better shuffle, air of being put upon, and total dedication to his task. Rather like Father Time carrying an armful of books. His assumption of the role came easily: Tony is a fine character actor and has appeared on Canadian TV on numerous occasions, and in plays in the UK, Canada, the USA and SA. We salute him!

### EARLY DAYS

In the early seventies, three mining groups had specialist coal preparation engineers in their Head Offices. Trans-Natal was the first to import an overseas coal preparation engineer in the form of Stan Lynch, who had held the prestigious position of Divisional Coal Preparation Engineer in the Northumberland and Cumberland Division of the National Coal Board. He served Trans Natal for many years and introduced perhaps new standards and concepts from which they possibly still benefit. His successor was Dr John de Kock, from the University of Cape Town. Rand Mines specialist was Morris Milner, now retired, and Anglo had me (now about to retire).

The three of us got to know each other over the next few months and often lamented the absence of a professional body to serve the coal preparation profession. The mining industry's view of coal preparation was low, most mine managers regarding the washing plant as an impediment to production. The "joke" about finding a plant operator was given, with some repugnance, in Chapter 3. Control at mine level was often rudimentary. The manager of a mine with a well known highly visible smoking dump really brought control to basics, being asked about his control system. "Well", he said "if the Witbank Town Clerk 'phones me to ask me to reduce the amount of combustion on the dump, I tell the plant operator to increase the amount of high-ash combustibles going to the product, so less goes to the dump and there's less smoke. But that puts up the ash in the sales product, so I wait for their sales manager to 'phone me and ask me to restore the quality. When he phones me I tell the plant operator to restore the original settings". So his control system was based on complaints: pragmatic but not really professional.

### First actions to form a professional society

My two colleagues knew that a professional society had been formed in the UK as the Coal

Preparation Society, and that there may have even been a similar body in Australia. Whilst the SAIMM was there and possibly waiting to help, our relatively small coal interest would soon have been absorbed and lost. So we decided to form our own society. Rand Mines were still in the Corner House, and the basement had a small delightful conference centre or mini-theatre in it. Morris arranged for us to borrow it for an afternoon and a notice was prepared and sent to all who might be interested announcing the formation of the society -then not properly named. Here the records become a little murky. That notice (App A) suggests the meeting was early or mid-1968. Whether the meeting was mid-'67 or mid '68, the response was gratifying: possibly as many as 100 people attended -and at the end the meeting resolved that such a society should be established.

Volunteers were sought from the body of the meeting to act as a committee to hammer out objectives, constitution, fees, and so on. The initial informal meeting of what was called the interim committee took place at my home on 38 8th Avenue, Parktown North on 28th August 1968, those present being the same as those listed below as attending the inaugural committee meeting on 8th October 1968. However, as the Members present at the Inaugural Meeting on 8th October ratified the 28th August decision to form a Society, the 28th August should be taken as the formation date of the SACPS.

We achieved a great deal at the interim meeting of 28th August: agreed upon a name for the society, wrote out a simple but then adequate constitution, elected interim officers and drew up a programme. As the current SACPS Committee is interested in the Society and its antecedent, the minutes of that first meeting are reproduced in full in the text. We also resolved that a more formal committee meeting should take place at which decisions of the interim committee should be ratified, the date and venue of 3rd October 1968 at the FRI being agreed. We also agreed upon a name for the Society, to be ratified later.

### Actions arising from the interim and inaugural meeting

### The Society's Name

The first thought was to use "Coal Preparation" in the name. But someone pointed out that that would exclude all those engaged in coke production coal conversion and other ramifications of the coal industry. "Coal Processing" was all-embracing, and so was adopted.

#### Meeting of 3rd October 1968

This duly took place at the FRI, where we ended up with a committee of 8 who were also elected officers of the SACPS:

Chairman: DW Horsfall (Coal Division, Anglo American)

Hon Secretary: Simon Streicher (FRI)

Hon Treasurer: Morris Milner (Rand Mines)

Other Members: John de Kock (General Mining); C J Hazard (AAC Coal Division); P J F Fourie (Fuel Research Institute);

W Gardiner (FRI); B T Seale (probably AAC Coal); and Stan Lynch who was voted onto the Committee in his absence. We agreed that the meeting should be known as the inaugural, those present (plus Stan) being regarded as Founder Members. However, there is no doubt that the formal date of formation of the Society should be taken as 28th AUGUST 1968. At

the October meeting some few changes were made to the interim Constitution –which became a source of worry from then on - and the topic for the first Technical meeting was arranged. To be held at the FRI in Pretoria, on November 6th 1968, it was to take the form of a group discussion led by Dr J W de Kock, the subject being the use of magnetite in dense medium plants.

Since its formation in 1968 the SACPS has remained vigorously independent, produced a handbook on the subject that has sold well on a world-wide basis, produced training courses from plant operator level to National Higher Diploma level, organised local and internationally attended conferences and has a regular programme of technical meetings for its members. But to continue the saga chronologically....

At the inaugural meeting, a list of possible topics was made which are given below. It is interesting that if the SACPS were being formed today, the list of topics might be similar to that evolved in 1968:

Magnetite; Training; Plant Performance Standards; Sampling; Pollution; Screening; Autogenous cyclones; Exchange of processing information; Abrasiveness; Briquetting; Costs; Price/quality relationship; Automation; Interpretation of analytical data; Staffing of plants; Tendering; Developments in coal preparation.

### First Technical Meeting: 4th December 1968

#### <u>Magnetite</u>

This was quite a success for a newly formed society. The attendance (as ever) was not large, but the discussion was vigorous. Technical papers were given on consumption and it was generally agreed to have been most worth while.

### YEAR 1969

### Training 12th March 1969

A good meeting at which the training needs of the coal preparation part of the coal industry were clearly outlined. Whilst the value of the training for City and Guilds Certificates, as carried out by AAC in 1967 and '68, was acknowledged, the need for a specifically South African course was emphasised, and accepted. Although this took a few years to achieve, it has been a major activity ever since that date. The need for re-grading plant operators was also agreed.

#### Sampling 6th April 1968

Data was submitted on the results of replicate sampling, and the International standards to be understood and applied was stressed.

#### Plant Performance Standards: 12th June & 13th August 1969

The 13th June meeting on the use of standards proved of such interest that it continued 13th August. The consensus was that the number of ways of expressing performance should be reduced and simplified:

## Washing Costs for Different Beneficiation Units 10 September 1969

Units for coarse, medium, and small -coal were included.

#### Issuing Tenders 8th October 1969

Ben van Eck, one of the Founders of VEL, led this discussion.

#### Autogenous cyclones, informal, Corner House November 19th 1969

By this stage, the SACPS, formed only in August 1968, had already held 8 technical meetings. The Committee was feeling somewhat overwhelmed, and resolved on 8th December 1969:

"That there should be a formal meeting every three months, with prepared papers by invited speakers; in between formal meetings informal monthly discussions should be held on topics of interest".

The (first) AGM, held as a "Sausage & Splash Barbecue" at Chairman's Home on December 12<sup>th</sup> 1969

### YEAR 1970

Less detail will now be given of papers in subsequent years. They were given in some detail for the first years to show how vigorous the Society has been since its inception.

#### February 11th 1970 "The Coal Preparation Engineer's Role in Marketing"

Stanley Thomas, Technical Manager of the Transvaal Coal Owners Association. Stan was a great upholder of the consumer's right to a quality product, and the formation of the SACPS had been greeted by the TCOA with some pleasure. A few spare copies of Stan's paper were found in the TCOA library, the remnants of which were taken over by Wits. Anyone interested?

#### April 8 1970 Reductants for Electric Furnaces J W de Kock

#### 13th May 1970: Natal Branch formed under leadership of Peter Armstrong. Committee: Chairman -P Armstrong; Secretary -D Fowler; Treasurer -P Beukes, other members -G F Rautenbach, J Coetzer, W Dubell, M M de la Porte

Also in May 1970, what must be regarded as the most significant event in the history of the South African coal industry took place. A five-man team -of which the writer had the honour to be a Member -went to Japan to negotiate, via Mitsui, the Heads of Agreement of a contract with the steel mills for the supply of "Low Ash Coal" (LAC) over a ten year period. Eight mines were originally involved. The contract tonnage, 23 million tons, enabled Government to build the Port of Richards Bay. A one-year pause was allowed by the Japanese for test work to be carried out to ensure that the specified quality could be met. When the final contract was signed in 1971, only four mines remained as suppliers: Greenside, Koomfontein, Landau, and Van Dyk's Drift. Landau actually started exports of LAC via Laurenco Marques in 1972; the others followed when Richards Bay opened in 1976. The

port facility enabled SA coal exports to rise from 1-2 million ton/annum (via LM and Durban) to the present 60 m tons/annum. The whole contract depended upon beneficiation, so needless to say the SACPS held a "Low Ash Coal" symposium later in the year.

#### 11 June, 9 Sept & 14 Oct. 25 November

Papers on Formcoke, Briquetting, Effluent Control, and Screening

On 10th August there was a formal request to the Society from the Colliery Managers' Association for the Society to set up, in association with the Chamber of Mines, a training course for plant operators, which would lead to a CofM Certificate. Clearly, the needs created by the LAC contract, as well as known deficiencies in operating standards, were to be addressed.

## YEAR 1971

Stan Lynch took over Chairmanship of the Central (original) section of the SACPS; and the Witbank branch was formed under the Chairmanship of Alex Bain (Manager of SA Coal Estates) on 24th January. Society events included:

A social evening for members and wives (January) Visit to the FRI Pilot plant to see the Pancake Char Plant The recovery of low ash coal from -0,5mm fines (Ortlepp of Corner House Labs, Rand Mines) "Comparison of Coking Properties" (Ewald Muller, FRI)

#### Low Ash Coal Symposium

The most significant event was the Low Ash Coal Symposium, held on 14th July. Three papers were presented, from AAC, General Mining, and Mitsui covering various aspects of the new contract and its likely benefits. "Coal, Gold and Base Minerals", by now well established as the Official journal, did us proud, presenting copies of reprints made into a single hard-covered volume.

### YEAR 1972

This year saw further work on plant operator training; more battles over the Constitution, mainly with the Natal Branch which objected to the constitution under which the Central Section was operating and more or less implied it had no right to operate; participation with the SA Institute of Chemical Engineers Symposium: "Coal in the Seventies" (17-18 1972).

Papers included a talk by the writer on foreign travels in pursuit of coal technology, and a paper by Dr Mackie on coal geology.

From the Society's viewpoint, the highlight was a talk by the renowned Dr K F Tromp, who spoke, as might be expected, about the Tromp Curve and its use.

### YEAR 1976

A full year for the Society, in fact an Annus Mirabilis for us and the Coal Industry of South Africa. We were addressed in January by Leslie Grainger, a Board Member of the NCB and Chairman of the Coal Technology Group of the International Energy Agency, who gave his views on the long-term prospects for coal as an energy source. We really had arrived! The long-awaited Petrick Report, burst upon the nation, with its views on the coal reserves and how they were being used and urging caution, particularly over coal exports. As Richards Bay was about to open with its massive export capability, there were cries of anguish from the exporters. One suspects that the release of the Petrick Report was carefully timed. The SACPS "scooped" the presentations on the report, the first being by "Bill" van Rensburg, a member of the Petrick Commission (March) then in June Dr Petrick gave the SACPS his first public talk on the report. That got us the front cover of "Coal Gold and Base Minerals".

1976 also saw us dipping a toe in international waters. The International Committee for Coal Research (ICCR) decided to hold a meeting in South Africa at the FRI. The meeting rapidly turned into a mini-Conference (about 20 delegates from the USA and another 10 from other countries). The SACPS organised a whole day presentation of papers covering all aspects of coal usage in South Africa. We rather went to town on the Social event expected by delegates, hiring the home and services of Des and Dawn Lindberg to have a sheep braai with musical entertainment. In discussing the entertainment with Des I said something ethnic might be appreciated, so he suggested giving a recently formed duo "Johnny and Sipho" a chance. Johnny was a lecturer at Wits, Sipho a gardener and they had put together a short song and dance routine, so I (by the powers invested in me by the SACPS) agreed. They were a great success and Mr Johnny Clegg went on to form Savuka and have an international career. Sipho's later activities have not been recorded. So the SACPS fostered talent in many ways.

Technical papers presented were on fines beneficiation and coal pyrolysis. The AGM took place in December and I presented a paper on the training of coal preparation plant personnel. By that stage the first training courses were in operation at CofM centres in Witbank and Natal (Dumacol).

Oh, and Richards Bay opened.

### **YEAR 1977**

This was probably the year that the SACPS started formal operator training. A team of lecturers drawn up from Society members lectured to some 25 or so at the CofM training centres, using the three volume book of notes prepared specially for the course. The first volumes were typed copies litho printed by the Chamber with hard covers made and put on by the Anglo printers. The Society designed and had made Certificates jointly in the names of the CofM and the SACPS. The course had been written in English but most of the operators attending were Afrikaans. Most lecturers were bilingual and could cope; but the demand for an Afrikaans version grew.

Papers delivered in the year included:

(Feb) A paper by Mr G P Verster, Chairman of the SABS Committee on Coal Sampling (he later became President of the SABS). Mr Verster spoke about the newly published Code of Practise in Coal Sampling.

(April) Mr Martin Hobrough, Managing Director of Brickor, spoke on Coal in the Brick Industry

(June) Mr Finsen, Head of the Jhbg Gasworks delivered a paper on the continuous vertical retorts under the tile "A Coelacanth of the Coal Industry".

(August). Walter Lurie gave a paper on the comparative merits of different dense medium washing units, stressing the point at which the change from baths to cyclones should be made. (late 77) Messrs Coine and Alberts from Allis Chalmers gave a paper on the ACCAR direct reduction process.

## YEAR 1978

By this stage the Plant Operators courses were well established. The original format, dayrelease (one day/week) proved difficult for some mines, so a two-week block release was tried. It was successful, and up to the present time, both types of course are offered. The long course ran 22nd August -15th November; the short course 26 Sep -7 Oct.

There were fewer papers this year as, in association with Rand Afrikaans University, the SACPS held a Spring School in Coal Processing at RAU. The two volumes of proceedings were in demand long after the School had ended.

Papers delivered included (but the list is not complete):

(Feb) Dr D O Hughes, Assistant Research Manager (Chemicals) of AECI spoke of the wondrous things that should happen to coal, especially in the conversion stakes "When Oil is \$30/barrel". (April) Mr Mitch Alberts, a research student at RAU spoke on "The Classification of Coal", with interesting views on what constitute carbon resources.

### YEAR 1979

### YEAR 1980

(2nd February 1981) In association with the Institute of Energy, the Society organised a Dinner and Technical Meeting at the Chamber of Mines Sports Club. The dinner was to celebrate the visit of Dr 'Joe' Gibson, Board Member for Science on the National Coal Board. Joe was always a staunch supporter of South Africa when such attitudes were highly unpopular. He spoke extensively about coal liquefaction.

(18th Feb) Paper by Siefried Hentges of Humboldt-Wedag on "Using Shaking Tables for the Preparation of Coal Fines or any Coarse Slurries".

## YEAR 1981

The Society received a request for "Coal Preparation for Plant Operators" from Hollywood California, which gave hopes that a sequel to "The Coal Miner's Daughter?", perhaps entitled "The Plant Operators Daughter", might be in the planning stage. Views of a sultry, coal stained comely girl, up to her knees in a slurry pond (rather like Anna Magnani in "Bitter Rice") filled our treasurer's mind. We heard nothing more from Hollywood.

The chronicles are incomplete for the year, so a full list of papers cannot be given. (9th October 1981) "Sampling Seminar" at Kelvin House. The main speakers were Mr 'Greg' Gould of the Fuel Engineering Company of New York, together with Robin Lazar and Brian Casey of M&L and Sid Davies of LTA Birtley. David Horsfall tried to interest Members in his view that there was a symbiotic relationship between coal sampling and Zen Buddhism, but none took up the gauntlet.

(3rd December 1982) Paper on Gasification by Professor Robin Judd, Department of Chemical Engineering, University of Natal, who spoke mainly of his own attempts to improve the process, especially for small and fine coal.

(18th Feb 1982) "On-stream Coal Analysis" by Mr Derek Barker of E L Bateman, at the FRI in Pretoria. The full paper was published in Coal Gold and Base Minerals Feb 1982. (2nd March 1982) Members were invited to a presentation by Ove Arup and Partners at the Sunnyside Park Hotel: "Colliery Discards; a Liability or an Asset".

The AGM for year 1981 took place in May 1982 at the Sunnyside Park Hotel. All meetings before that date are classed as 1981 meetings; after that date as 1982 meetings. The speaker was D W Horsfall who gave an account of the network of underground canals serving the Duke of Bridgewater's coal mines in. the eighteenth century.

# YEAR 1982

A year mainly devoted to technical papers rather than momentous Symposia and conferences; the Committee needed a break from the frenzy of 1981.

(22nd April) "Computer Simulation of Coal Preparation Operations: presented by Mr A D Young of Shell Coal. According to the Chronicles, "The author brought along a small computer with VDU and printer, and gave a sparkling presentation that maintained the audience's interest long after such meetings usually closed."

(9th June) Symposium "Gasification of Coal for General Industry" (jointly with the TCOA and SA Institute of Mechanical En2:ineers. The Keynote Address, known as the George Bernard Memorial Lecture was delivered by Mr F E Hart, Marketing Director of the Babcock- Woodall Duckham group. George was the highly respected and well liked expert on gasifiers who had recently died. His widow and son Will (well-known on the waves) were present, Mrs Bernard. ~eceiving a Memorial Testimonial.

(9th August) Visit by People to People Citizens Ambassador's delegation from the USA. The SACPS received a request, possibly from President Reagan asking for our assistance in organising a coal mining delegation's visit. We organised a mini Symposium at very short notice consisting of half-a-dozen 15 minute presentations, with similar response by the visitors.

The August 1983 newsnotes in SAMW contained the cryptic comment "The August meeting will not be as advertised. This is hardly surprising as the June meeting, held in July, actually took the form of the presentation intended for September". We seemed to be a living ganglion of irreconcilable antagonisms.

(August 25th), Kelvin House "New Developments in Jigging" presented by Mr Lambert of Fives Cail Titaco

(25th October) Audio Visual Display on Air Pollution, by courtesy of the Clean Air Society; The evening was memorable for teaching Members of the Society that, when using an unfamiliar slide projectors, it is preferable to read the instructions first, especially the bit about turning the machine "on".

(November 1983: Social evening at the Hof van Holland restaurant, Pretoria. Mr Nick Taylor provided appropriate musical entertainment; Mr Shackley of ESKOM and Mr Symons of SA Mining World were the speakers.

(Jan 2nd 1983): detailed resume of beneficiation papers presented at the October 1982 ICCR Conference (Messrs Fourie and Horsfall)

(16th March 1983) AGM at the FRI Pretoria; Mr Miller in the Chair.

journal, SA Mining World was introduced to Members.

# YEAR 1983

(March 16th 1983) AGM for year 1982; all papers after that date are regarded as 1983 papers. (Jan) Technical session in the Council Chamber at Kelvin House

(June ) Talk by a Mr Hoogervant

(October) A film evening in the Lecture Theatre at the SABS

The AGM for year 1983 took place on 16th March at the Fuel Research Iristitute, Pretoria. Mr Miller in the Chair .

### YEAR 1984

The Society tie appeared; designed by Mr Fick Fourie, it was available in grey and maroon. (June) Talk by Kevin Brooks on "Spontaneous Combustion"

(21st June) "Dense Medium Beneficiation of Fines" NICR. Professor Peter King of Wits. detailed and very interesting paper exploring the fundamentals of dense medium fines beneficiation and with Prof King's work on the pilot plant at Wits described in detail. (July) Paper on fine coal cleaning by Mr David Vetter, of AARL. The basis of the paper was the statistical concept of 'random walk'. The meeting closed with a plant test, using the coal prep models. It exposed hidden depths of uncertainty among some of those present. (July) Technical Meeting at Megawatt Park on "Coal Gasification"

(August) "Belt Cleaners" by Mr Campbell Smith of Watson, Edwards, and van der Spuy. (October) A One-Day Symposium on Spontaneous Combustion, from which a comprehensive volume covering all the technical papers was published. The volume was much in demand and no copies are available !

(23 October) Short paper session "Training in Coal Preparation" NICR. Speakers: Dr J Lurie (Head of the School of Mining and Metallurgy at Wits Technikon, who spokeabout the new National Certificate in Coal Preparation); S Turnbull, who spoke about the existing Basic Course; and Mr John Sedgeman, Past President of the Queensland Coal Preparation Society, who spoke about training in Australia.

(Nov 22nd) Social Evening at the Rosebank Hotel. The cost, excluding drinks? R20/head The AGM was planned for March 1985

#### YEAR 1985

This year was momentous for the Society in that the International Conference on Coal Research held their 7th Conference in Johannesburg/Pretoria, from 14th-18th October. The event was largely organised by the NICR who are the official representatives in the ICCR Organising Committee, and held at the CSIR Conference Centre; but the SACPS was invited to have a Member on the Organising Committee for the Conference. The DMEA largely funded the event except for one small item: gifts for the delegates, and we were asked to fund those. The request was taken back to the SACPS Committee. It was accepted and, after much debate, specially made cufflinks were thought appropriate for the occasion. They were made by a well know local jeweller, Tessa Fleischer, who produced silver cufflinks with a square panel. It was inset with a 9 carat gold circle, the whole being in effect the SACPS logo; although it bore "ICCR". A special pair, studded with industrial diamonds, was made for President Botha. The SACPS thought the design sufficiently attractive (ditto the run-on price) to commission a number of extra sets and the Society is still using the remaining sets for the Annual Award for the most meritorious contribution to coal preparation.

The final banquet was held at the Sandton Sun, and the State President, Minister Danie Steyn, and the Director of the NICR (Dr Erasmus) were to speak. The Organising Committee thought a 2 ton block of coal, festooned with the national flags of the Members of the ICCR would look rather nice outside the banqueting hall and please would the SACPS provide one. The heroes of that particular saga were Rand Mines and the Knight in White (slightly coal spotted) Armour John Rennie. The arrival was memorable with said block on a hand propelled carrier lumbering along the corridor with the building manager anxiously walking alongside saying the Conference would collapse any minute. It didn't, and the manager must have forgotten the collective weight of a battalion of mink and manure housewives walking en-masse for their morning coffee and cake session.

Anything built for them would laugh' at a block of coal.

There was another interesting incident involving President Botha. He was appraised that a gift awaited him, and as the rep of the SACPS I was designated to present it to him. He came to the 2 ton chunk of coal, the meaning and use of which was explained to him by Alan Cooke, Deputy of Randcoal. The symbolism of the cufflinks was unfolded, and the Staatspresident informed that he was now a sort of ambulant coal washing unit. The diamonds were described: one a black piece of boart representing coal as we thought real coal would dirty his shirts and Mrs Botha might disapprove. She was present, swathed in pink and with a pink feather boa, and nodded agreement. The other cufflink bore an industrial diamond that might pass for a gemstone in the dusk with the light behind it. The President was then told that as he was in possession of uncut diamonds and he was liable to be arrested at any moment. He responded that there were no policemen to be seen so, why worry? "The rejoinder was that they were present and being his secret police, didn't intend to be seen; but de Beers had saved the day by getting for him a Certificate enabling him to have two uncut diamonds in his possession. "Would he like to learn how we got the Certificate?" Great enthusiasm, Mrs B, Ministers Steyn and Schoeman gathered round to hear how de Beers legalised the Staatspresident. "The Certificate was granted at John Vorster Square, and the Konstabel attending to the application first asked the name of the applicant. given as Peter Willem Botha; next question was 'address?', which was answered by giving your Cape address. Then the most important question 'Beroep?' The response, 'Staatspresident', made the Constable put down his pen and say " 'n Sertifikaat is nie nodig nie; die Staatspresident is bo die Wet". This produced an immediate effect upon President Botha. Putting a hand on my shoulder and giving me a personalised admonishing forefinger he simply said it was the first time he'd heard that and said, with great stress, 'THE STATE PRESIDENT IS NOT ABOVE THE LA W! And with that Mrs Elise Botha put her hand on his arm and they swept into the banquet, ten minutes late. I found him and engaging and friendly man and thoroughly enjoyed the encounter; and he seemed to do so as well.

(July) Paper by Mr Pieterse from Iscor on Ferro-alloy production

(September) Talk by Professor Friedel Sellschop (Deputy Vice Chancellor Research at Wits) at the Chamber of Mines Sports Club. An interesting and novel approach to depositing carbon atoms on surfaces to give ultra wear resistant surfaces and even the possibility of such deposition leading to cheaper ways of making artificial diamonds.

# YEAR 1986

(May) AGM at the National Institute for Coal Research (a.k.a. FRI)

# YEAR 1987

Advanced Coal Preparation Training commenced to a syllabus and course content prepared by the SACPS. The exam led to a National Certificate in Coal Preparation awarded by the Department of Higher Education for those who enrolled and had a Matric Certificate. This year saw the reorganisation of the membership lists. A card-index system was introduced by a part-time secretary, Mrs Hughes. The year was designated the Year of the Plant, with technical visits largely taking the place of technical papers.

The AGM was held on 15th April at the CofM Sports Club, Mr Fourie in the Chair. He was re-elected Chairman, DWH as Secretary, Robin Lazar Treasurer .

The following visits were made:

(July) Visit to Grootegeluk, followed by a visit to Matimba Power Station, the world's largest dry cooled station. There was a braaivleis in between.

(July) Visit to NICR Pilot Plant with a paper about it delivered by Fick Fourie. (September) Visit to Middelburg Mine Services: comprehensive mine and plant visit followed by a meal.

(November) Social Function at the Rosebank Hotel, very well organised by David Peatfield. It was very well supported by coal processing firms. The entertainer was Noel Glover. (November) Visit to New Vaal and Lethabo Power Station

## YEAR 1988

From the Archives, 1988 seems to have been a fairly quiet year. The Chronicler headed the Newsnotes "Summer Hibernation" and you can't get more candid than that The comment was added that there was little happening from late November (1988) to January (1989) so what didn't happen can hardly be reported. Technical meetings were as follows:

(13th Feb 1989) Mr H C 'Joe' Voges of Iscor gave a paper on the ISKOR work on fines beneficiation. The audience considered it one of the best papers they had heard because of the tremendous amount of research work it contained, and the way that research was then used to establish industrially applicable concepts. The meeting, held at Northwards (the former Dale Lace stately home, later lived in by the Albus family and now being carefully and lovingly restored by Genmin) was punctuated, nay dominated by mishaps, such as lack of an overhead projector, last-minute change of venue and general, though minor, chaos. Joe bore it all serenely; though Iscor must be a good training ground for dealing with the unexpected.

# YEAR 1989

This was the year of the Society's 21st Birthday and appropriate celebration took place. special tie was created, with the design committee putting in the sort of effort required for a major coal preparation plant. Special wine glasses were made for the Annual Dinner.

### Technical Meetings:

(15th June) "The Role of the Fuel Technologist in Coal Marketing" Richard Ward Building, Wits. The paper was delivered by Mike Harris, General Manager of Richlab (Pty) Ltd. (28th August 1989) Anniversary Meeting Conference Room of the Division of Energy Technology (ex FRI)

By coincidence this was 21 years exactly from the first technical meeting of the Society, which was held in the same room. The event was tinged with sadness, as it was the last time the room would be used as the DET was moving, rather rapidly, to the CSIR campus. The first part of the evening was, naturally, devoted to reminiscences of the early days of the Society, from the "Evening of Nostalgia and Indigestion" (early coal films plus a monstrous cabbage pie baked by one of the Members) to the "Chop and Bottle Splash" AGM; and the debate over whether Members should pay 5 cents for their refreshments: all part of life's rich tapestry.

Following splendid refreshments provided by the ladies of the DET, D W Horsfall gave an account of the Arthur le Page Memorial lecture delivered in Australia earlier in the year. The lecture was established by the Australian Coal Preparation Societies to commemorate Arthur le Page, a much loved coal preparation engineer who died somewhat prematurely. (6th- 7th September) Spring School, Witbank Section, at the Colliery Training College,

Witbank .

This two day event was organised by the Witbank Section as their contribution to the 21st birthday celebrations. Topics included dense medium separation, pollution, slurry pumping, spiral operation, and dense medium cyclones.

(30th October-2nd November) Joint Symposium with the SAIMM "Total Utilisation of the .Resource" Witbank Civic Centre

This was a major event and led to the publication of a two-volume of proceedings. Over 40 papers were presented, half of them by Members of the SACPS.

(16th November) Ovcrview of the papers presented at the UCT Flotation Seminar: presentation by Dr J-P Franzidis.

# YEAR 1990

(AGM 21st March 1991, Richard Ward Building, Wits University. Mr Peatfield in the Chair) Mr Peatfield reported that in this, the 21st Anniversary of the Society's formation in 1968, no fewer than 22 papers had been presented by Society Members in 2 symposia. He noted that the Constitution appeared to have been finalised and that negotiations to establish a National Diploma in Fuel Technology (with Technikon RSA) were well under way.

Mr Johns reported that five technical meetings had been held specifically for Society Members. The Social Event, held at the Wanderer's Club on 15th March was, as ever, well attended (330 at tenders). The guest of Honour and receiver of the cufflinks was Dr Peter van der Walt who spoke of his 40 years in coal preparation. Entertainment was provided by singers from Wits whose efforts, though generally appreciated, were not really liked by some.

### YEAR 1991

(AGM 26th March 1992, Mr van den Berg in the Chair in place of Mr Michael)

The following technical papers were presented:

(May) "Concepts of Coal Dewatering" Mr E Koppe of KHD, plus "Report Back on the ICPC held in Japan, Mr F Snyders of Gencor

(July) Reports back on the Singapore Conference on Column Flotation, Creswell of the VEL Division of E L Bateman, and Mr van den Berg

(October) "On Line Efficiency Monitoring" D W Horsfall

(November) Peter Hand, Randcoal "Super Product Mine"

The Social Event held at the Wanderer's Club on 24th January 1992 was exceptionally well attended with some 400 participants; it was well organised by Mr Don Smith. Peter Holz was elected an Honorary Member for his services to coal and the SACPS.

# YEAR 1992

(AGM 25th March 1993: Mr van den Berg in the Chair)

Three technical papers presented:

"Liberation Studies on Waterberg Coal" D W Horsfall

(August) "Bias Testing is a Waste of Time" Pierre GY, world renowned expert on the sampling of particulate material and a man of strong opinion; author of several books on sampling

(October) "ISO/SABS 9000" by Ian Muir and Vaughn Clark

(Feb 1993) The Annual Dinner Dance was very well attended and held at the Wanderers.

## YEAR 1993

The Chairman, Mr Falcon reported that in June 1993, the International Organising Committee of the International Coal Preparation Congress voted to include South Africa as a full member. Their chosen vehicle for such representation was the SACPS and Professor David Horsfall their chosen representative. This had really placed the SACPS as a Member of the top body in our discipline. The IOC now included Members from the UK, USA, Canada, Mainland China, the former Soviet Union, Australia, France, Germany, Poland, Brazil – and South Africa.

He noted that the World Coal Institute wished to have a Coal Day in 1996 and approached the DMEA, who in turn asked the SACPS to take the lead. The SACPS accepted the role.

The course for the National Diploma in Fuel Technology was finalised through Technikon RSA. Matriculated participants taking the Advanced Coal Prep Course through the CofM College in Witbank should be eligible for the National Diploma in Coal Prep provided they also registered with Technikon RSA.

Six technical meetings were held during this year (which, because of the April 1994 covered part of 1994), namely:

(Mar 93) "Coal in Borneo" D W Horsfall

(June) "ATCOM Plant Design" D Peatfield

(August) "Grootegeluk Expansion Project" E Venter, Head of Preparation at Grootegeluk (August) "Dense Medium Separation of Fine Coal" Prof Laszkowski, University of British Columbia

(October) "Coal Quality and Boiler Efficiency" M Daly, ESKOM

(Feb 1994) "Coal Preparation in Poland" Konrad Wrobel, Consultant, 'Separator' The Chairman made a plea for an organisation to act as an "Umbrella" body for the coal industry to be formed, to receive and answer queries on SA coal as necessary, and to act as a voice for the coal industry. Since the demise of the TCOA, and the curtailment of coal operations at the CSIR, there was a clear need for such a body. The SACPS should assume such a role, especially with the ICPC coming along in 1998 and, as agreed with the IOC, South Africa in 2004.

### YEAR 1994

to be completed

#### YEAR 1995

Papers on smokeless fuel, history of the SACPS, the LARCODEMS, Joint Symposium with SAIMM, visit of Head of WCI, creation of levels of membership.