

IGS NEWS

NEWSLETTER OF THE INTERNATIONAL GEOTEXTILE SOCIETY
VOLUME 4 NO 2

JULY 1988

Editorial

by
R. Kerry Rowe - IGS News Editor

IGS News has grown! This issue represents the first expanded, 12 page issue of the IGS News. It is our hope that with the additional space we can provide a better vehicle for communication with the IGS membership. You will, for example, notice a number of new features. They include a new section "News of Members" which is intended to provide information concerning recent developments, projects, products, promotions etc. relating to both individual and corporate members. If you have any information which you would like included - please send it to the Editor or Associate Editor. You will also notice a new section on "Corporate Profiles". This is intended to provide a benefit to both the individual members and our corporate members by allowing the corporate members space to introduce their company or association and to present their achievements.

As a service to the membership, each issue of IGS News will list the contents of recent issues of Geotextiles and Geomembranes (the official journal of the IGS). We also hope to increase our emphasis on providing news from around the world and news relating to new products or novel applications for geotextiles and related products. However, we need your help! Please send us any interesting news that you may have (and if possible, include a photograph).

IGS News is published three times a year (March, July, and November); the deadline for material is the 16th day of the preceding month (i.e. February 16, June 16, and October 16 respectively). The deadline for the next issue of IGS News is, therefore, October 16, 1988. Please help us to serve you by sending any useful material either to the Editor or Associate Editor at the addresses listed on page 10.

Two Years After the Vienna General Assembly

by
J-P. Giroud - President of the IGS

We all remember the lively and productive general assembly held in Vienna on April 8, 1986, where we elected new Council members and new officers. Two years later, what have we accomplished? I invite you to review a document on the next page entitled "IGS Achievements, April 1986-1988". You will see that a lot has been accomplished. Clearly, the IGS is growing, is well organized, works for the entire profession, and is highly visible and respected in the engineering world. Today, it would be impossible to imagine our profession without the IGS.

Of course, there is always more work to be done. The Council of the IGS has appointed one of its members, Professor Floss, to review the state of the IGS. He will make recommendations for future action at the October 1988 meeting of the Council to be held in Tokyo. You are certainly most welcome to contact him or the IGS secretariat to indicate your evaluation of the work accomplished so far, as well as to offer suggestions for future action.

Membership growth is one area where additional effort is needed. We are still far from the goal of 1000 members which I set two years ago and hoped to achieve in the short term.

Some countries have been slow, while others must be commended. In India, for example, as a result of the enthusiasm surrounding the organization of the First Indian Conference on Geotextiles, combined with the dedication of some individuals, there are now 45 members, and a chapter is being formed. This example should be followed because we need a larger membership.

It is essential to have a larger membership because the IGS has the volume of activities that would normally be expected from a society with several thousand members. As a result, a great deal of effort is required from a small number of individuals. We have reached the point where the availability and energy of the dedicated individuals cannot be increased. Only their number can increase. If we fail to do so, we may experience a decline in the quantity or, worse, the quality of IGS activities.

Membership growth is the business of every member, and I am sure that each of you will help by seeking new members. I am sure that together we will accomplish a lot in the next two years. I am sure that we will be well prepared for the general assembly to be held in The Hague and that we will have a very successful international conference.

IGS Achievements

APRIL 1986 - APRIL 1988

1. Membership
 - Individual membership: from 420 in April 1986 to 620 in April 1988
 - Corporate membership: from 21 in April 1986 to 24 in April 1988
 - Chapters: from 2 in April 1986 to 4 in April 1988
 - The president of the IGS has visited, and made technical presentations to, the North American, UK, and Southeast Asian chapters. He will visit the Japanese chapter in 1988, and the Indian chapter (in formation), also in 1988.
 - New systems for the collection of membership dues are being studied.
2. Bylaws and Policies of the IGS
 - Guidelines for Chapters have been amended several times and are now basically complete.
 - Guidelines for International Conferences and Guidelines for National and Regional Conferences have been amended several times and are now basically complete.
 - Guidelines for Events supported by the IGS have been prepared.
 - Guidelines to prevent commercialism in papers published in cooperation with the IGS have been prepared.
 - A document describing benefits to members has been prepared.
 - A document describing IGS Awards has been prepared.
 - A document on the IGS newsletter is being finalized.
 - Standard bylaws for chapters are being finalized.
 - The IGS bylaws are being revised.
3. Publications
 - A new editor has been appointed for IGS NEWS, and IGS NEWS is being increased to 12 pages.
 - An editorial board has been appointed for IGS NEWS and has reviewed every issue.
 - "Geotextiles and Geomembranes" has become the official journal of the IGS.
 - The IGS Directory was published in 1986. It was upgraded and published in 1987. New improvements are presently being implemented for the 1988 Directory.
 - The inventory of standards is being upgraded.
 - A special form for ordering IGS publications has been prepared and widely circulated.
4. Conferences
 - The IGS is actively monitoring the preparation of the Fourth International Conference on Geotextiles, Geomembranes and Related Products, to be held in The Hague (Netherlands).
 - The procedure for selecting the venue of international conferences has been reviewed and the IGS has started the process to select a venue for the Fifth International Conference. It has been decided to exclude Europe for the venue of the Fifth Conference. This difficult decision has been made by the Council to broaden the international base of the IGS.
5. Organization of the Society
 - The IGS has cooperated with the organizers of three conferences which were held with IGS support or under its auspices: RILEM in St. Remy (France), Geosynthetics '87 in New Orleans (U.S.A.), and Post Vienna Conference in Singapore.
 - The IGS is cooperating with the organizers of six conferences which will be held with IGS support or under its auspices: Hamburg (Germany), Bombay (India), Kyushu (Japan), San Diego (California), Liege (Belgium), Rio de Janeiro (Brazil) (in addition to The Hague).
5. Organization of the Society
 - Council meetings have taken place on a timely basis in carefully selected locations (Vienna - Austria, Tampa - U.S.A., The Hague - The Netherlands, Greenville - U.S.A.)
 - Eleven officers meetings have taken place in eight different locations: Milan, Atlanta, Tampa, Brussels, The Hague, London (Ontario), Greenville.
 - Council meeting minutes have been thorough and prepared in a timely manner.
 - A vote has been organized at the appropriate date for the renewal of seven seats in the Council.
 - Dues have been collected on time.
 - The Secretariat in Brussels operates efficiently to provide information on the Society and sell publications.
 - A Committee on Manufacturing of Geosynthetics is being formed.
6. Life of the Society
 - A call for candidacies for the IGS Awards is being prepared and the Awards Committee is being formed.
 - IGS Council members attended a reception in Greenville, South Carolina, and a similar reception is being planned in Tokyo.
 - A seminar is being organized in Tokyo where all speakers will be IGS Council members.
 - The president of the IGS delivered a closure address at the Vienna Conference.
 - The president of the IGS delivered keynote addresses at the New Orleans conference and the Singapore conference, as well as at the inaugural meeting of the U.K. Chapter in London. Similarly, the past-president of the IGS delivered a keynote address at the Conference on "Advanced Technologies in the Field of Transport Construction" held in Bulgaria.
 - The president of the IGS has sent messages which were read during the opening sessions of conferences in China, Japan and Italy.
7. Promotion and Related Activities
 - Forms for membership application have been upgraded and widely circulated, attached to a letter from the president.
 - A brochure in English has been printed and its translation in French, German, and Italian is being undertaken. This brochure is being circulated.
 - Announcements regarding the IGS have been published in various journals and magazines (Geotextiles and Geomembranes, Geotechnical Fabrics Report, ASCE News, Geotechnical News, etc.).

- The president of the IGS has prepared introductory articles for special issues on geotextiles and geomembranes in magazines (such as Civil Engineering (U.K.), Water Power and Dam Construction), as well as an editorial in "Geotextiles and Geomembranes".
- The president of the IGS has officially represented the IGS at the inauguration of the new president of Clemson University, South Carolina.

8. Professional Activities

- Legal action has been taken to ensure the free use of the words geotextile, geomembrane, and related terms.

- Several IGS Council members are actively working in committees belonging to other international societies or organizations (e.g. ISO (International Organization for Standardization), ISSMFE (International Society for Soil Mechanics and Foundation Engineering)).
- The IGS is cooperating with the ISSMFE to co-sponsor conferences such as the Post Vienna Conference held in Singapore (1987), as well as conferences to be held in Kyushu (Japan), Bombay (India), and Rio de Janeiro (Brazil).

4th International Conference on Geotextiles and Geomembranes

As will probably be known to most IGS News readers, the 4th International Conference on Geotextiles, Geomembranes and Related Products will be held in The Hague (Netherlands) from May 27 to June 1, 1990.

After the 3rd International Conference in Vienna, where the Dutch Geotextile Organization (NGO) was selected to host the 4th Conference, the Organizing Committee has been actively but quietly making the necessary preparations. Now the organizers wish to come out into the open to indicate that:

- 700 (or hopefully more) people from all over the world will attend the conference in The Hague;
- 130 papers will be presented;
- all exhibitors who wish to display their products and expertise will have a comfortable booth;
- experts who wish to present a short course (1 day) as a satellite session have the opportunity to negotiate a suitable arrangement with the Organizing Committee or the NGO;
- the Paper Selection Committee (which has been approved by the IGS Council) will finish its job by mid-September 1989;
- the Scientific Committee will start to evaluate your abstract by mid-May 1989;
- enough "Hollandse Nieuwe" (Dutch herring) will be caught in time to provide the Conference with a real Dutch sea taste on Scheveningen boulevard;
- the Oosterschelde storm-surge barrier, which is founded on geotextiles, can function with a crowd of experts on top of it!!

- the football teams that played in Vienna are undergoing intensive training to be in perfect condition for the grand final in The Hague.

in short, that you will remember The Hague 1990 for a long time after the 4th Conference.

Note:

This announcement does not replace the Call for Papers. The Call for Papers will be distributed in October 1988. However, should you have urgent questions about the 4th Conference, write, fax, telex, or phone the General Secretary:



Deadline for Candidacies for the 5th International Conference

The selection process for the selection of the venue of the Fifth International Conference on Geotextiles, Geomembranes, and Related Products will start on January 1, 1989. The conference will take place in 1994 and its venue will be announced at the next general assembly of the IGS in 1990 at The Hague, Netherlands.

Since European countries have hosted the First and the Third Conference, and will host the Fourth, the IGS Council has agreed to give priority to countries outside Europe in the selection of the venue for the Fifth Conference. A letter of

intent has already been received from the Canadian Geotechnical Society, in conjunction with the Industrial Fabrics Association International, for a conference in Canada.

Candidacies from countries outside Europe are welcome until December 31, 1988.

Letters of intent should be sent to the IGS Secretary, G. Massenaux, 51 Avenue des Cerisiers, 1040 Bruxelles, Belgium.

Society Activity

IGS OFFICERS AND COUNCIL MEETINGS

by G. Massenaux

The IGS officers and Council held a well attended meeting in Greenville SC (U.S.A.) on April 15-17, 1988. Council members agreed that the Society was making substantial progress, and was delivering more and more services to its members.

The Council dealt with a long and detailed agenda which reflects the growing activities of the Society. Items discussed at the Council meeting included:

1. The election procedure for the renewal of half of the Council membership was reviewed. Ballot forms were posted to all members. Ballots were opened and results proclaimed in early May (see separate article). The election was conducted under the scrutiny of witnesses.
 2. IGS membership is continuing to grow. Individual membership is significantly increasing in North America and in Asia. Efforts will be made to recruit corporate members from various segments of the business.
 3. Considerable time was devoted to discussing a proposal for a "committee on manufacturing of geosynthetics". A document outlining the mission of the proposed committee was distributed and approved. The committee has now been formed and its first task will be to contact all IGS corporate members who are manufacturers, and, with their close cooperation, to get an agreement on a detailed work agenda for such a committee. Mr. H. Schneider has been appointed acting chairman.
 4. The status of the various Chapters and proposed Chapter were discussed. It was reported that:
 - *United Kingdom* - The UK section of IGS has now been formally established and the few minor bylaw difficulties have been settled.
 - *India* - There are now about 45 members. A request for forming an IGS chapter is pending. The Council requested that a majority of Indian IGS members express their wish to form a chapter. The bylaws of this proposed chapter are still to be examined.
 - *North America* - The IGS officers met with the president of the North American Geosynthetic Society (NAGS), Mr. Joe Fluet. The issues discussed were:
 - A student society has been set up inside NAGS. The IGS supports this initiative. The IGS Council has also recommended the introduction of a student membership category for the IGS (at an appropriate fee and with limited rights), however, this cannot occur at the IGS level until the next General Assembly in 1990.
 - The Council of IGS formally endorsed the organization of the next North American Conference on Geosynthetics (to be held in San Diego, February 1989) under the auspices of IGS. There will be special discounts for IGS members at this conference.
 - The Council agreed that NAGS could use the 1989 Conference as a means of enlisting new members in IGS. This will be closely coordinated with the treasurer of IGS, Mr. Peter Stevenson.
 - NAGS announced their intention of setting up specialty conferences in addition to its regional conferences. This was met with a warning of caution from the IGS Council which did not want attention to be taken away from the 4th International Conference on Geotextiles in the months prior to that Conference. The International Conference on Geotextiles is scheduled for May 27-June 1, 1990 in The Hague, The Netherlands (see separate article).
 - *South East Asian* - The formation of a South East Asian Chapter, with headquarters in Singapore, was unanimously approved, subject to minor modifications of their bylaws. The countries represented in this chapter would be clearly indicated and the right of countries to withdraw from the chapter was to be guaranteed.
 - *Japan* - The Council heard a report on the activities of the Japanese Chapter presented by Professor Fukuoka. This chapter has been meeting on average once per quarter. Professor Fukuoka also outlined the programme prepared by the Japanese Chapter's members for their IGS Council guests in October.
- 5) The Council requested that the officers draft a final version of the bylaws for IGS chapters, based on the experience gained over the last few years. It was agreed that IGS fees are the responsibility of the IGS and that right of appeal to the IGS exists for admission or dismissal of members from IGS chapters. The Council left open the question of having corporate members for the IGS chapters.
 - 6) The Council examined an updated version of the IGS Awards Regulations. It agreed on setting up an IGS Award and an IGS Young Member Award. This could be allocated under various headings. The Council instructed Prof. Ch. Schaerer, as chairman of the Awards Committee, to finalize regulations and to determine what the Awards would be. Only IGS members are eligible for these Awards. Nominations for these Awards for the 1987-1988 period should be sent to the IGS secretariat not later than March 31, 1989. The Award winners will be selected by a specially appointed Awards Committee. These Awards will be publicized and will be presented at the International Conference in The Hague.
 - 7) The Council was informed of the decisions made by the officers on its behalf regarding IGS News (see IGS News, Vol. 4, No. 1, page 3).
 - 8) The Council devoted some time to reviewing the organization and actions of the IGS. A member of the Council was asked to evaluate the progress which has been made up to the mid-term of Dr. J-P. Giroud's presidency.
 - 9) The accounts for 1987 were approved by the Council and the pro-forma budget for 1988 was adopted. In connection with the current satisfactory budget situation, it was noted that most of the growth in IGS activities

was the result of the goodwill of a few dedicated individuals. The growth in membership and number of IGS projects was putting a strain (both in terms of time and finances) on these people. This problem will have to be addressed in the near future.

- 10) The Council was pleased to note that the procedure for selecting a venue for the 5th International Conference had been initiated. The Council was informed that Canada had offered to host the Conference. Calls for additional candidates would be made in the July issue of IGS news (see separate article).
- 11) The Council discussed the free use of the words "geotextiles," "geomembranes," "geosynthetics" and related neologisms. It reaffirmed that there should not be any proprietary restriction on use of these words in any language or country. Council reaffirmed the IGS's responsibility to ensure that this principle is respected and that no IGS member acts directly or indirectly against this principle.
The Council then examined, in the presence of Mr. Jesus Andreu, the situation which had arisen as a result of Mr. Andreu's registration of these words (in Spanish) for Venezuela. Mr. Andreu then agreed to initiate and facilitate the transfer of these registered words from his name to the IGS.
- 12) The Council confirmed that the 1988 Directory would be issued this summer and it made various suggestions for improvements.
- 13) A paragraph was added to the guidelines for the IGS Conferences and Events whereby organizers provide a free copy of the proceedings to the IGS.
- 14) An IGS Promotion Brochure in English was presented by Mr. Steve Warner, who was congratulated by the Council on the quality of the brochure. These brochures

are available on request. A German and a French version (and maybe Italian) are to be prepared for distribution (budget permitting).

- 15) A report on the activities of the standards and terminology committees was presented.
- 16) Prof. Ara Arman was asked to organize a "research forum" in cooperation with the organizing committee of the 4th International Conference in The Hague and to submit a research update sheet for publication in IGS News.
- 17) Prof. Koos Van Harten reported on the preparation of the 4th International Conference on Geotextiles, scheduled for May 27-June 1, 1990 in The Hague. The first bulletin with a call for papers will go out this Autumn. The establishment and composition of the Paper Selection Committee was approved by the Council. There will be 90 papers presented at The Hague, with 40 others being included in Poster Sessions. A total of 130 papers will be printed. There will be an Exhibition in an adjacent hall throughout the conference.
- 18) The IGS Council has reviewed conferences organized under the auspices or with the support of the IGS. These include past conferences, such as the successful conference held in Singapore (October 1987) and future conferences to be held in Hamburg (Germany), Kyushu (Japan), Bombay (India), San Diego (U.S.A.), Liege (Belgium), and Rio de Janeiro (Brazil).
- 19) The Council and officers will next meet in Tokyo, October 9-10 after the Kyushu Conference. On October 11 a seminar will take place in Tokyo, all speakers being Council members. Members of the Japanese Chapter of the IGS will attend as well as other guests.

Elections For IGS Council

The ballot box and the envelopes were opened and the votes counted and checked on May 10, 1988. Mr. J.M. Rigo acted as a witness. The results of the counting were as follows:

368 envelopes were received. They included 349 yellow (individual) voting forms and 19 pink (corporate) voting forms. Twelve (12) individual forms and two (2) corporate forms were declared not valid, as they did not follow the voting instructions. This left 337 individual forms and 17 corporate forms totalling 337 plus 85 votes, i.e. 422 votes.

The following candidates were elected as members of the IGS Council for a 4-year term:

M. Fukuoka, J-P. Giroud, E. Leflaive, B. Myles, P. Rankilor, R.K. Rowe, and K. Van Harten.

We congratulate the new Council members and look forward to their active cooperation for the benefit of IGS.

Business and Culture Meet On Common Ground

The officers and Council of the International Geotextile Society met in Greenville on April 15, 16, and 17, 1988 on matters of the Society's business.

A highlight of the event was a reception held in the Wyeth Gallery of the Greenville County Art Museum. This reception was hosted by several members of the IGS and was the occasion for the announcement of the formation of a Committee on Manufacturing of Geosynthetics within the IGS.

The following members of the Committee on Manufacturing of Geosynthetics were represented at the reception: Amoco, Hoechst-Celanese, James River, Gundle Systems, Dupont, Rhone-Poulenc and Polyfelt.

This social event provided an excellent opportunity for members of the IGS to meet and communicate with the Council in a relaxed and friendly atmosphere. It was an enjoyable and profitable experience for all present.

News of Members

Rhone-Poulenc expands Bidim

France's Rhone-Poulenc Fibres has announced plans to add a fifth polyester spunbond line at its facility in Colmar, for an investment of Fr100 million. The lines currently in operation have an estimated capacity of 5,000 metric tonnes. The new state-of-the-art line will increase capacity by 50%.

Polyester-based Bidim fabrics are currently produced at two locations in France as well as in Brazil, Australia, and South Africa.

Texel develops drainage filter

Texel Inc., Quebec, Canada, has developed two new drainage products composed of a needlepunched polyester filter sandwiched around a polyethylene drainage net, or core fabric, which the company purchases from Gundle, Houston, Texas.

Called Tex-O-Drain systems, the product is available in two sizes - No. 200, a one-sided filter device weighing 1,000 g/m²; and No. 400, a two-sided device weighing 1,200 g/m².

The products are used in geotextile soil drainage applications for retaining walls and maintaining trenches and athletic fields.

Geoservices Expands

GeoServices Inc. Consulting Engineers, headquartered in Boynton Beach, Florida, has announced the opening of a regional office in Norcross, Georgia, near Atlanta.

GeoServices Inc. is a consulting firm specializing in geotechnical and geosynthetic engineering, waste disposal facility design, environmental engineering and permitting, hydrogeology, construction monitoring, and laboratory testing.

The principals of the Norcross office are Dr. Rudolph Bonaparte and Dr. Neil D. Williams. Other senior staff include Dr. John F. Beech and Mr. Harold E. Gill.

Polyfelt tentatively plans to double its spunbond capacity in the U.S.

Polyfelt Inc. has begun a feasibility study that may lead it to double capacity for its spunbonded and needlepunched polypropylene (PP) geotextiles by 1990.

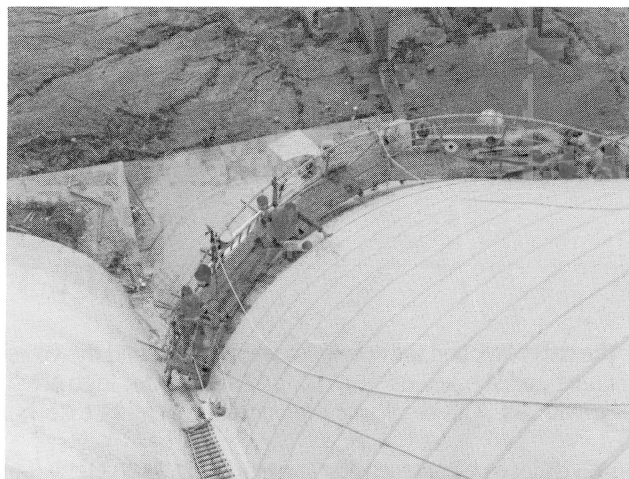
Enka Becomes Akzo

Enka by Industrial Systems Group of Arnhem, The Netherlands has adopted a new corporate identity. Effective March 31, 1988, Enka became the "Fibres and Polymers division" of its parent company Akzo which, with over 70,000 employees, is one of the world's largest chemical companies.

New Italian Geocomposite Product

A new geocomposite has been recently designed and produced in Italy. The geocomposite is a multi-layer glass fibre reinforced PVC geomembrane, coupled to a 400 g/m² polypropylene staple-fibre needle-punched geotextile. The peculiarity of this geocomposite (which will be marketed under the name of GEODAM (R)) is the possibility of gluing it to the support. Special adhesives have also been also studied and tested; they are supplied both for cement-based supports and for bituminous supports.

An experimental application of GEODAM has been completed on one of the shells of Molato Dam. The structure was built in reinforced concrete in the early '20s. The shell protected with GEODAM is about 45 m high. Design and assistance were provided by Piero Sembenelli who also contributed to the development of GEODAM.



GEODAM being installed at the Molato Dam

Information Sources

Geosynthetic Design Guidance for Hazardous Waste Landfill Cells and Surface Impoundments, by G.N. Richardson and R.M. Koerner has recently been published. This 247-page design manual includes twenty-seven worked example problems. It is available for \$40 domestic (\$50 foreign) from:

Geosynthetic Research Institute
Drexel University
West Wing - Rush Building (No. 10)
Philadelphia, PA 19104
U.S.A.
Attention: Mrs. Marilyn Ashley

Institut Textile de France (ITF) - Fibre Charts

ITF - Lyon has recently edited with l'Industrie Textile Journal two synoptic charts about:

- man-made fibre characteristics for technical end-uses
- characteristics of fibre for apparel and upholstery

These charts contain the description and the physical, mechanical, thermal, electrical, chemical properties of all the fibres available for the different textile end-uses. They can be purchased for US \$75 from:

ITF - Lyon
B.P. 60
69132 Ecully Cedex - France

Corporate Profiles

As indicated in IGS News Vol. 4, No. 1, the IGS Council has decided that in every issue of IGS News three Corporate Members will be allocated up to one page each to allow them to introduce their company or association and present their achievements. The Editor invites three Corporate Members to prepare material for each issue. The choice is based on consideration of (a) length of time as a corporate member of IGS, (b) providing a regional cross-section of the corporate membership, (c) providing a cross-section within the industry,

and (d) availability of the corporate profiles. The Editor also invites Corporate Members to submit material well in advance. In the event that an invited Corporate Member does not provide material for a selected issue, the Editor will select a corporate profile from those on file based on the criteria listed above. The Corporate Members selected for the next issue (Vol. 4, No. 3) have already been notified, however, other Corporate Members are invited to provide material in advance of a direct invitation for a given issue.

The Swiss Society of Geotextile Specialists

by
Ch. Schaerer, President SVG/ASPG

The Schweizerische Verband Der Geotextilfachleute/Association Suisse Des Professionnels Du Geotextile (SVG/ASPG) was founded as a non-profit organization in spring 1981 to meet the ever-growing need for coordination between engineers, producers and testing laboratories interested in the use of textiles in civil engineering projects.

Activities

The main purpose of the Society according to its bylaws is the exchange and diffusion of information in much the same manner as the IGS. The most significant accomplishment so far is the publication of "The Geotextile Handbook" which has ten chapters on the practical application of geotextiles. The handbook also includes an appendix with the symbols recommended by the IGS and their definition in three languages (German, French and English), as well as a standardized catalogue of geotextiles with their description and the physical and chemical characteristics of all the products offered by the manufacturers. This handbook has been such a success that the first bilingual edition in French and German is already sold out. The general assembly has decided to print a second edition and to add two new chapters. We are also hopeful that the general demand for an English edition will soon be satisfied.

Although production of "The Geotextile Handbook" has absorbed a large part of the group effort these last years, there have been numerous other activities such as conferences, visits, encouragement of research and the publishing of new developments in the field of geotextiles. In fact the two new chapters to be written for the handbook are:

- long term behaviour of geotextiles with respect to the stability against the action of mechanical, chemical and hydraulic agents in soils; and
- the use of geotextiles in reinforcing bituminous road surfaces and repair of cracked asphaltic surfaces.

The Society publication "GEOTEX" appears three times per year with technical articles, information from the executive committee and the technical commission as well as news about conferences relating to geotextiles. Reprints are available for non-members.

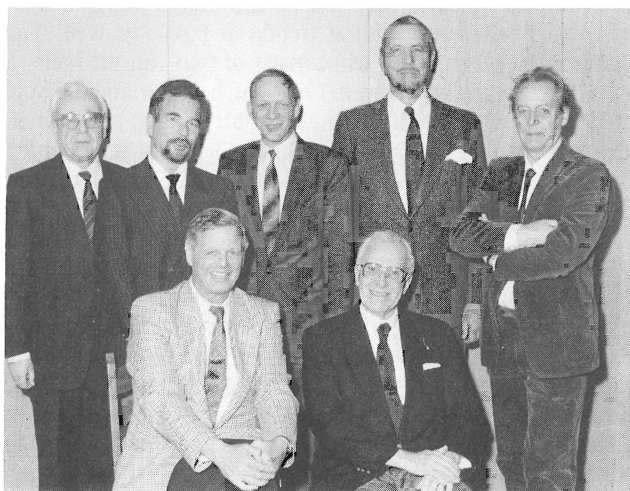
Membership and Organization

At present the Society has 65 individual members, 25 corporate members (public authorities, laboratories, engineering offices, societies and companies) and 10 manufacturers.

The Society holds its annual meeting every spring and is directed by an executive committee of seven persons. The Technical Committee (TC) is a permanent group comprising six representatives of the producing firms (active in rotation for a period of two years) and six members chosen among engineering offices, public work administrations and research institutes.

The SVG/ASPG has been a corporate member of the IGS since 1984 and contributed significantly to the successful Third International Conference of Geotextiles in Vienna 1986. The Society maintains close ties with other national organizations and is participating in the organization of conferences and symposiums in the German-speaking nations, the first one being K-GEO-88 to be held in Hamburg/FRG, September 29-30, 1988.

The president of the Society since its formation was also the first president of the International Geotextile Society (IGS) and was nominated its first honorary member.



The executive committee of SVG/ASPG; seated (left to right): the Vice President H.W. Furrer and the President Ch. Schaerer
Standing (left to right): J. Lampe, R. Müller (Secretary), E. Martin, J. Cuniberti, Dr. P. Dreyer (Treasurer) Photo P. Schälchli, Zürich

TOKYU CONSTRUCTION CO., LTD.

General Contractor



Kunio Nakamura

Tokyu Construction Company started out in 1959 as a general contractor with just over 130 employees. Today, on the eve of its 30th anniversary, it has grown into a major corporation with a work force of 4,000 and a turnover of 337.4 billion yen (\$US 2.72 billion) a year. It has established a secure position in Japan's construction industry that puts it in the company of venerable firms with histories stretching back over a century.

As a member of the Tokyu Group, it has over the years accumulated extensive knowledge, not only in construction technology but in a wide range of other fields including transport, development, distribution, leisure services, culture and education, as well as overseas enterprises.

For example, the Tokyu Construction Co. is presently engaged in construction of 'The Tokyu Cultural Village' in the area adjacent to the main store of the Tokyu Department Store in the Shibuya area of Tokyo. This comprehensive project was implemented with the combined efforts of all the Tokyu member companies. The Tokyu Cultural Village will serve not only as a facility to further vitalize the Shibuya area, Tokyu's homeground, but will be the Tokyu Group's contribution to the new cultural trends in Japan as well. The Cultural Village complex will consist of two concert halls, a 2,150 seat main hall and a 770 seat hall, an audio/visual hall, an art museum and complementary shops and stores. The total cost of the Cultural Village, including the opening costs, is budgeted at 18.6 billion yen (\$US 150 million), and is scheduled to open in the autumn of 1989.

It has been said that the 21st century belongs to the pan-Pacific region. The Tokyu Group has therefore been focusing its operations mainly in this region, with its experience and expertise gained on the domestic scene coming strongly to the fore. The Group is also involved in large-scale regional development projects in the U.S.A. and Australia. On the island of Hawaii, the Group is engaged in developing an especially exclusive resort, and is also involved in retailing.

We are determined in the years to come to further improve this technological base while forging new frontiers in as yet undeveloped endeavours in the field of construction.

1-16-14, Shibuya, Shibuya-ku
Tokyo 150, Japan
Tel: Tokyo (03) 406-5111
Cable Address: "TOQCONSTRUCTION"
Telex: TOQCONST J25834
Fax: Tokyo (03) 406-5508

The author is currently the Director of Tokyu Construction's Technological Research Centre. After graduating from Tokyo University in 1955, where he studied architectural engineering, Mr. Nakamura entered Tokyu Corporation - the main company of the Tokyu Group. In 1970, he joined Tokyu Construction and has been instrumental in Tokyu's growth and technological success.

We have been studying ways in which to use geotextiles for embankment reinforcement since 1983. Because of the heavy rainfall in Japan, slope failures often occur. Consequently we have used permeable non-woven geotextiles in embankments to facilitate drainage. The photograph shows one of our experimental studies on retaining walls. In this test we used non-woven geotextile sheets for reinforcement and prefabricated lightweight concrete panels for the facing.

Through IGS activities, we hope to continue to learn more about the many new ways in which geotextiles can be utilized.

Major Projects:

Name of Client, Title of Project, Country, Contract year
(Japan)

Fanac - Fuji Factory - Yamanashi 1986

Kokusai Kogyo - Yaesu Fujiya Hotel - Tokyo 1983

Nigata Pref. - Kariyada River Dam - Nigata 1980

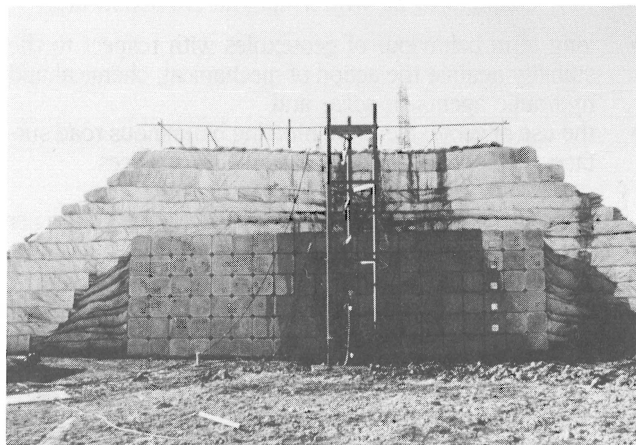
Japan National Railway - Tohoku Shinkansen, - Funato Section- Tokyo 1985

(Overseas)

Mauna Lani Resort - Mauna Lani Resort Development - Hawaii 1983

Expressway & Rapid Transit Authority of Thailand - Rama IX Bridge 1987

Riverview Development - Riverview Condominium - Singapore 1987



Geotextile reinforced soil wall: Tokyu Construction Co.

Rhone Poulenc — Nonwoven Department

A specialized producer since 1966, the nonwoven Department of RHONE-POULENC produces and markets durable high performance fabrics in polyester, under the trade name Bidim, with particular emphasis on applications in the building and civil engineering industries.

Depending on the characteristics of these markets RHONE-POULENC produces either needled spun laid fabrics for geotextiles or heat bonded fabrics notably for the sealing and waterproofing of roofs.

To supply these markets very considerable investments have been made in recent years.

In France the Department has two production units: at Bezons (near Paris) and at Colmar in the heart of Europe. Abroad, Bidim is also produced in Brazil by the Rhodia SA (Rhone Poulenc Group) and under licence in Australia by Geofabrics Australasia and in South Africa by Kaymac Industries. A new plant will be operating in the USSR by the end of 1989. The trademark Bidim is registered in more than 100 countries.

In 1988 the International Bidim Group will have an available yearly production capacity of 80 million square metres of Geotextile. In the public works sector, Bidim is backed by 20 years of experience and world-wide references.

The beginning of 1988 will signal major new developments: Bidim is being updated with a revised range of 7 products. This revision gives products ideally suited to the developing technical requirements of geotextile users. The combination of mechanical and hydraulic properties for all geotextile applications, for which Bidim is well known, will be maintained. Some of the new offerings include:

BIDIM/ROCK — an important step forward, providing designers with not only the classical separation, filtration and drainage properties of Bidim but also strength of up to 200 kN/m in one product. This high strength high modulus range of reinforced nonwovens is ideal for embankments over soft subsoils and for soil reinforcement.

MEGADRAIN — a composite drain consisting of a 3-dimensional mesh core surrounded by a Bidim filter. This product is designed for vertical and horizontal drainage: retaining walls, tunnels, bridge abutments, road edge drains, etc.

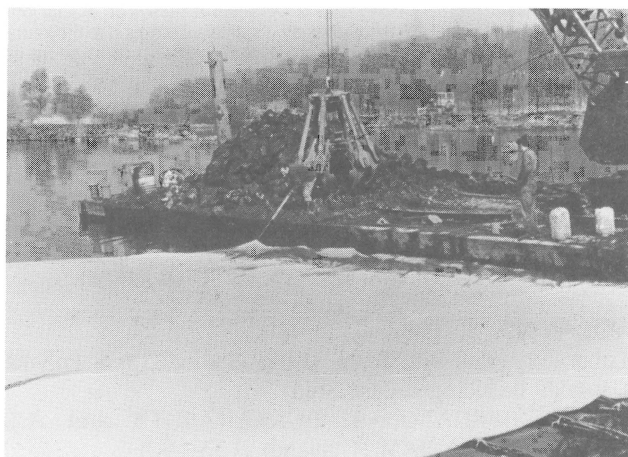
REFLECTIVE CRACKING — a new product is being specially designed for retarding reflective cracking after road resurfacing.

RHONE POULENC, the leading French chemical and pharmaceutical group, operates in 140 countries. In 1987 it employed 78000 people, 31000 outside France.

RHONE POULENC's activities revolve around 5 sectors:

CHEMICALS — HEALTH — FIBRES — AGROCHEMICALS — MEDIA

The RHONE POULENC International Group generated consolidated net sales of 54 Billion Francs in 1987.



Bidim being used in the construction of a river embankment

Publications Recommended by IGS

Conferences:

First International Conference

"Proceedings of the International Conference on the Use of Fabrics in Geotechnics" (Three Volumes)

to be ordered from:

ENPC, Service Formation Continue, 28 rue des Saints Pères, 75006 Paris, France

The publications listed below can be ordered from:

IGS Secretariat, 51 Avenue des Cerisiers, 1040 Brussels, Belgium

Second International Conference

"Proceedings of the Second International Conference on Geotextiles." (Four Volumes)

Price: \$72 plus postage to be ordered from:

IFAI, 345 Cedar Building, Suite 450, Saint Paul, MN 55101, USA

Third International Conference

"Proceedings of the Third International Conference on Geotextiles" (Four Volumes)

Price: US\$ 128 for America, 300 hfl for the rest of the world to be ordered from:

IFAI (see address above), for America, or, for the rest of the world, from: BALKEMA, Postbus 1675, NL-3000 BR Rotterdam, Netherlands

Proceedings of Geosynthetics '87

New Orleans, USA 1987

Price: US \$50 plus postage, from:

IFAI, 345 Cedar Building, Suite 450, St. Paul, MN, 55101, USA

Proceedings of the Post Vienna Conference on Geotextiles

Singapore, 1988

Price: US \$50 plus postage, from:

Conference Logistics & Services, Orchard Point Post Office Box 576, Singapore 9123

Publications of the IGS

Directory of Members 1987

Name, address, telephone, telex and telecopy number of all IGS members as of 30 June 1987. All IGS members should have received a free copy \$10 per additional copy for members - Price for nonmembers: \$15

Geotextile Testing Inventory 1986

A 217-page compilation of geotextile test methods used in 13 countries.

Price for IGS members \$60, Price for nonmembers \$90

Symbols for Geotechnical Engineering, Geotextiles and Geomembranes

A list of symbols adopted by the IGS for the Third International Conference on Geotextiles

Free for IGS members, Not available to nonmembers

Research Activity

To provide a medium for improving coordination and possible cooperation in research, it is planned to include a section on research activity in each issue of the IGS Newsletter. Researchers and institutions are hereby requested to send the editor a short description of current and future research activities related to geotextiles for inclusion in this report. We would also like to publish a list of theses (M.S. or Ph.D.) which have been written on geotextiles. Former students and/or their supervisors are invited to send details of the theses to the editor on a continuing basis.

Dr. R.A. Douglas
Department of Forest Engineering
University of New Brunswick
Fredericton, N.B., Canada

Topic: *The Use of Geotextiles in Forest Roads*

This research programme addresses a problem unique to forestry, namely, high axle loads applied by vehicles running over exceptionally poor subgrades. The effectiveness of geotextiles in improving road performance is being assessed by means of a number of large-scale model tests. To date, tests have been conducted in a 2.5 m square above-ground test bin which has a 30 tonne capacity movable loading frame and instrumentation package. A new above-ground test bin (4m x 5m) has just been completed and this will be used for even larger scale model studies.

Geotextiles & Geomembranes

an official Journal of the IGS

The international journal *Geotextiles & Geomembranes* is an official journal of the IGS. Individual IGS members may obtain a subscription to the journal at a discount of 40 percent off the list price. Such reduced subscriptions are available directly from the publisher:

Subscription Department
Elsevier Applied Science Publishers
Crown House
Linton Road
Barking
Essex IG11 8JU
United Kingdom

The editor, T.S. Ingold, the Editorial Board Chairman, J-P. Giroud and the IGS Editorial Board Representative, K. van Harten, hope that IGS Members will use *Geotextiles & Geomembranes* as an outlet for their technical papers and thus contribute toward the continuing success of this high quality publication, which now has subscribers in over 40 countries worldwide. Papers should contain work not published in full elsewhere and should be sent to:

Dr. T.S. Ingold
Mulberry Lodge
St. Peters Close
St. Albans
Hertfordshire AL1 3ES
United Kingdom

(Instructions to authors are also available from Dr. T.S. Ingold)

Papers published in recent issues are listed below:

VOL. 5 NO. 3, 1987

Laboratory Pull-Out Tests Using Bamboo and Polymer Geogrids Including a Case Study

D.T. BERGADO, A. BUKKANASUTA and A.S. BALASUBRAMANIAM (Thailand) (153-190)

Design Charts for Roads with Geotextiles

R.D. HOLTZ and N. SIVAKUGAN (U.S.A.) (191-201)

Geotextiles for Unpaved Roads — A Review of Design Procedures

M.R. HAUSMANN (Australia) (201-234)

VOL. 5 NO. 4 1987

Practical Examples of Geotextiles Used in Small Earth Dams

G. DEGOUTTE (France) (239-250)

Model Tests on Peat-Geotextile-Lightweight Aggregate System

A.J. VALSANGKAR (Canada) and T.A. HOLM (U.S.A.) (251-260)

Effect of High Levels of Alkalinity on Geotextiles. Part 1: Ca(OH)₂ Solutions

Y. HALSE, R.M. KOERNER and A.E. LORD Jr (U.S.A.) (261-282)

The Applicability of Darcy's Law in Determining the Water Permeability of Geotextiles

L. VAN DER SLUYS and W. DIERICKX (Belgium) (283-300)

Editorial Request

Please send photos!

The value of a newsletter lies not only in the basic articles but in the presentation of useful and up-to-date information. We ask all members to provide information that they feel will be of interest to other members.

The editorial deadline for the next edition of the newsletter is October 16, 1988 - but you do not have to wait until then, avoid the rush, act now and send your information to:

Prof. R. Kerry Rowe
Editor, IGS News
Geotechnical Research Centre
The University of Western Ontario
London, Ontario N6A 5B9
Canada, Telex 064-7134, Fax (519) 661-3292
or Mr. Silvio Tonus
Associate Editor, IGS News
Du Pont de Nemours Int. S.A.
50-52 Route des Acacias
CH-1211 Geneve 24
Switzerland

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Mechanical Engineering Department
Technische Universiteit Delft
Postbus 5036
2600 GA Delft
The Netherlands

Mr. Peter E. Stevenson (Treasurer)
James River Corporation
Route 4, Box 607
Easley, SC 29640
U.S.A.

Note:

New telephone area code for Dr. Giroud,
(407) instead of (305).
Make a note in your IGS Directory.

Calendar of Events

Kongress Kunststoffe in der Geotechnik (K-Geo 88)

Hamburg, Germany
29-30 September 1988
Contact: Prof. Dr. R. Floss
Lehrstuhl und Prüfamt für
Grundbau
Bodenmechanik und Felsmechanik
der TV
München, Baumbachstrasse 7
8000 Munich 60, Germany

3rd Canadian Symposium on Geosynthetics

Waterloo, Ontario, Canada
4 October 1988
Abstracts due: March 31 1988
Papers due: August 15 1988
Contact: Dr. G.P. Raymond
Dept. of Civil Engineering
Queen's University
Kingston, Ontario K7L 3N6 Canada

International Geotechnical Symposium on the Theory and Practice of Earth Reinforcement

Kyushu, Japan
5-7 October 1988
Contact: Prof. N. Miura
Dept. of Civil Engineering
Saga University
Saga 840, Japan

First Indian Geotextiles Conference

Bombay, India
8-9 December 1988
Contact: Dr. J.N. Mandal
Organizing Secretary
FIGC-88
Civil Engineering Department
IIT, Powai, Bombay - 400 076,
India

2nd GRI Seminar: Durability and Aging of Geosynthetics

Philadelphia, Pennsylvania, U.S.A.
8-9 December 1988
Contact: M.V. Ashley
Geosynthetics Research Institute
Drexel University, Rush Bldg. 1
No. 10
Philadelphia, PA 19104, U.S.A.

ASTM Symposium: Microstructure and the Performance of Geosynthetics

Orlando, Florida, U.S.A.
26 January 1989
Abstracts Due: 1 April 1988
Papers Due: 1 October 1988
Contact: Dr. I. Peggs
Geosyntec Inc.
3050 SW 14th Place, Suite 18
Boynton Beach, FL 33426 U.S.A.

Geosynthetics '89

San Diego, California, U.S.A.
20-24 February 1989
Contact: Judy Dean
Secretary General
IFAI
345 Cedar Bldg., Suite 450
St. Paul, MN 55101 U.S.A.

RILEM Conference: Reflective Cracking in Pavements

Liege, Belgium
8-10 March 1989
Contact: J.M. Rigo
State University Liege
Quai Banning 6
B4000 Liege, Belgium

2nd International Symposium on Environmental Geotechnology

Shanghai, China
15-17 May 1989
Contact: Prof. S. Pamukev
Dept. of Civil Engineering
Lehigh University
Bethlehem, PA 18015, U.S.A.

IDEA 88, International Nonwovens Conference

Baltimore, Maryland, U.S.A.
24-26 October 1988
Contact: INDA
1700 Broadway
New York, N.Y. 10019, U.S.A.

Short Courses: Designing With Geosynthetics

Philadelphia, PA 3-4 November 1988
Chicago, IL 10-11 November 1988
Atlanta, GA 17-18 November 1988
Contact: M.V. Ashley
Geosynthetics Research Institute
Drexel University, Rush Bldg. 1
No. 10
Philadelphia, PA 19104, U.S.A.

Twelfth International Conference on Soil Mechanics and Foundation Engineering

Rio de Janeiro, Brazil
13-18 August 1989
Contact: Prof. Costa Nunes
12th ICSMFE
Caixa Postal 1559
20000 Rio de Janeiro, RJ, Brazil

Fourth International Conference on Geotextiles, Geomembranes, and Related Products

The Hague, The Netherlands
27 May-1 June 1990
Contact: Prof. K. van Harten
University of Technology, Delft
2 Mekelweg
P.O. Box 5036
2600 GA Delft, The Netherlands

*Note: Highlighted items are organized under the
auspices of or with the support of the IGS.*

List of Corporate Members of the IGS

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OBJECTIVES OF IGS (*)



The International Geotextile Society was formed with the following objectives:

- (1) to collect, evaluate and disseminate knowledge on all matters relevant to geotextiles, geomembranes, and related products;
- (2) to improve communication and understanding regarding geotextiles, geomembranes and related products, as well as their applications;
- (3) to promote advancement of the state of the art of geotextiles, geomembranes and related products as well as their applications;
- (4) to encourage through its members the harmonization of test methods, equipment and criteria for geotextiles, geomembranes and related products.

WHY BECOME A MEMBER OF THE IGS?

First, to contribute to the development of our profession

Becoming a member of the International Geotextile Society:

- helps support the aims of the IGS, especially the development of geotextiles, geomembranes, and related products
- contributes to the advancement of the art and science of geotextiles, geomembranes, and related products, as well as their applications
- provides a forum for designers, manufacturers, and users, where new ideas can be exchanged and contacts improved.

Second, to enjoy benefits

The following benefits are available now to all IGS members:

- A directory of members, the IGS DIRECTORY, published every year, with addresses, telephone, telex, and telecopy numbers
- Newsletter, IGS NEWS, published three times a year
- Reduced purchase price on all documents published by the IGS
- Reduced registration fee and preferential treatment at all conferences organized under the auspices of the IGS
- Reduced subscription fee for the journal "Geotextiles and Geomembranes"
- A central system for ordering selected publications
- Possibility of being granted an IGS award.

MEMBERSHIP APPLICATION

Membership of the Society is open to Individuals or Corporations "...engaged in, or associated with, the research, development, teaching, design, manufacture or use of geotextiles, geomembranes and related products or systems and their applications, or otherwise interested in such matters".

The annual fee for membership is (US) \$30 for Individual Members and (US) \$1000 for Corporate Members. Individuals or corporations who voluntarily contribute a minimum of (US) \$200 annually to the Society, in excess of their membership dues, will be mentioned in the IGS Directory in a separate list as benefactors.

If you are in North, Central, or South America, send this completed form to:

Mr. P.E. Stevenson, Treasurer
c/o James River Corporation
Nonwovens Division
Route 4, Box 607
Easley, SC, 29640 USA
Telephone: (1.803) 240-2600
Telex: 9102401933 Telefax: (1.803) 240-2695

If you are in the rest of the world send this completed form to:

Mr. Guy Massenaux, Secretary
c/o EDANA
51, Ave des Cerisiers
1040 Brussels
BELGIUM
Telephone: (32.2) 734.9310
Telex: 26634 Telefax: (32.2) 733.3518

In this area, write your address as you wish it to appear in the next IGS Directory (your professional address is recommended, but your personal address is acceptable provided the telephone, telex, and telefax numbers are also your personal numbers).

If the address below is your personal address please check this box

In this area, write a short description of your activities as you wish it to appear under your address in the next IGS Directory (e.g., "Consulting Engineer", or "Salesperson for XYZ Geotextile Company"). If the name of your company already appears in the above address, you need not repeat it in this area.

Title (circle one): Mr. Ms. Dr. Prof. Other _____

First Name: _____ LAST NAME _____

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Address (Street or Postal Box) _____

City _____ Province/State _____

Postal Code _____ Country _____

Telephone _____ Telex _____ Fax _____

Eligibility (i.e., connection with geotextiles, geomembranes, or related products): _____

• Membership fee – Individual (US) \$ 30.00
Corporate (US) \$1000.00

• Benefactor's contribution (at least (US) \$200): _____

Mode of payment – A check is enclosed The applicant hereby agrees to pay the above total amount upon receipt of an invoice

SIGNATURE DATE

* A copy of the byelaws is available upon request.

IGS NEWS Published by the International Geotextile Society.

Editorial Enquiries to Dr. R. Kerry Rowe, Geotechnical Research Centre, The University of Western Ontario, London, Ontario N6A 5B9, Canada. Telex 064-7134. Phone: (1.519) 661-2126, Fax (1.519) 661-3292