



CAVEX IMPRESSIONAL

A new Look at Alginate

Cavex Impressional is not just the best alginate to use because of its colour. Its handling properties and superb detail reproduction are other excellent features. So put quality into your practice.

Your assistant will appreciate the characteristics of Impressional: the blue alginate from Cavex.

It mixes easily, and has the optimal working time and thixotropic consistency. A guarantee of comfort, for both you and your patients. Plus its technical properties and minutely detailed impression, create a solid foundation for accurate laboratory work. Ask your dealer about the new Cavex Impressional introductory package and accessories.







Samples on request. Please contact Cavex Holland for further details.

EUROPEAN DENTAL STUDENTS MOVING FORWARD!

Our dental world is changing fast! The EDS Congress in Athens is still in our minds while our colleagues in Barcelona are already preparing the next one. Researches, developments and materials make it necessary to adapt quickly to a

Magazine.

new situation. The EDS has also changed its constitution to create the possibility for non-EU countries to become a full member of the dynamic organization.

A communication network has been established among the EDS delegates, by using Internet meetings, e-mail, telephone and faxes. In the past several years, the EDS has brought many dental students together in Europe. We keep on going, new projects are developed and others encouraged.

You are aware of the time you live in, so you know that there is no border or limit to cross Europe; make new friends, explore dental life and find similarities instead of differences. In the future you will



Editors Casper P. Bots and Pieter van der Geld preparing this EDS

see that these contacts will improve the quality of dentistry in Europe. Don't think anymore, just react and ask the EDS delegate in your country for more information.

I would like to take this opportunity to

thank Pieter A.A.M. van der Geld for all he has done in the past; his time, investigation, clear view on the future of the EDS, editorship, being the president of the EDS and much more. That is why all the delegates have decided, during the EDS meeting in Bucharest to give him the Honorary Life Membership of the EDS. Congratulations!

Concluding, I hope this magazine will encourage you to discover Europe. While the European leaders keep talking about integration, you can start right now by action. Go for it!

Casper P. Bots, The Netherlands EDS Magazine Editor

Contents

COVER: "Toothbrushes" by Mr. Hans Verstegen, Amsterdam		
EDITORIAL: European dental students moving forward.	C. Bots	3
REVIEW 2 nd CONGRESS ATHENS: We stand together, together as one.	N. Mattheos	5
TOWARDS THE YEAR 2000: The XVIIth meeting, September 1996, Ljubljana, Slovenia.	P. van der Geld	7
EDS IN A TURNING MILLENIUM: The XIXth EDS meeting, March 1997, Bucharest, Rumania	P. van der Geld	8
LETTER OF THE NEW EDS-PRESIDENT	N. Mattheos	9
CONGRESS OF EUROPEAN DENTAL STUDENTS: Barcelona, Spain, 8-12 October 1998	P. van der Geld	11
IADS: SUDAN VILLAGE PROJECT		12
SCIENTIFIC: Caries detection; to drill or not to drill?	C. Bots	15
NEWS FROM	C. Bots	17

Imprint

EDS MAGAZINE SPECIAL
Journal of the E.C. Dental Students Committee

Publisher	H. W. Haase	
Editors	C. P. Bots Orteliuskade 50-II NL-1057 AJ Amsterdam	
	P. A. A. M. van der Geld Eikenburglaan 29 NL-5428 BJ Rosmalen	
Editorial Office	Quintessenz Verlags-GmbH Ifenpfad 2-4 D-12107 Berlin Tel.: + 49 - 30 - 761 80 - 5 Fax: + 49 - 30 - 761 80 680	
Managing Editor	C. Klose	
Production Manager	A. Rauschenbach	
Subscription Manager	A. Köthe	
Advertising Sales Manager	HE. Rohn, C. Nyari	
Copyright	© 1997 by Quintessenz Verlags-GmbH All rights reserved. No parts of this journal may be reproduced	

without permission from the publisher. The publisher assumes no responsibilty for unsolicited manuscripts. Articles are accepted with the understanding that they have not been published previously and that they are submitted solely to

REVIEW 2nd EDS CONGRESS ATHENS

OCTOBER 2ND-6TH, 1996

FIF "We stand together, together as one...... FIF

It has been only a few months since that day in October, when the "Athens sun" warmly welcomed 450 dental students and dentists in our 2nd Congress. The congress was hosted in Zappeion Megaron, a charming and impressive neoclassical building in the heart of Athens, with more than 100 years of tradition hosting successful meetings and event. In the centre of the National Park, just under the shade of the Acropolis, Zappeion twice hosted the E.C. Prime Minister meetings in the past years.

DENTISTRY AT THE DAWN OF THE NEXT CENTURY

The scientific programme included 20 lectures from distinguished professors covering a great variety of topics, not only from the fields of dental science but new technology applications, ethics, student and professional matters, also including an open workshop on exchange project, specialities, and educational problems. The scientific programme was carried out in two sessions, morning and afternoon with a lunch break of one hour and a half. Starting at 9.30 a.m. and finishing at 7 p.m. or even later in the day, the programme was really full. However, the participation was extremely high and often the 380 seats in the main hall were not enough and extra seats had to be added!

What was really surprising was the active participation of students in the scientific programme. Student presentations were selected and included in the form of free announcements or posters. An evaluation committee, consisting of distinguished professors evaluated and awarded 5 of the presentations, but also expressed its appreciation for the high academic standard of all student presentations.

The participation of the audience was beyond expectation, with a lot of questions and a high level of discussion after every student presentation. The active participation of the students pro-

ved that dental students have both interest and knowledge, and I hope a tradition will be carried on to all our next congresses.



Spectacular view from the Acropolis.

THE SOCIAL PROGRAMME: EXPLORING GREECE!

The social programme was full of events, hoping to leave all participants with a wider picture of Greece, its life and people. A party organized by the Greek students association was programmed to welcome those of the participants who arrived earlier than expected. A live Rock group followed by Greek music and dance was the best way to bring us all closer. The official opening night took place in the charming Central Open Hall of Zappeion Megaron. First we listened to the opening speeches of the officials and EDS President, Pieter van der Geld. Then we listened to the opening song, performed by our Editor Casper Bots. A glass of wine, a snack and the smooth sound of a Jazz Quartet under the open night sky, helped us to know each other better. The second night was the time to taste the Athens night life. A big party in a centrally located club, where fun went on till the crack of dawn.... Don't search to find any

EDS Congress

photos of this event... It appears everyone was having too much fun to care about taking pictures. The third night a lovely Greek "tavern" hosted participants. With the bottles of wine coming one after the other, delicious Greek dishes and live Greek music, we relaxed and enjoyed the cosy atmosphere.

The last day was a day devoted to Greece, ancient and modern. Waking up early in the morning (even the last moment!), we visited Mycenes, the ancient city and the Tomb of Agamemnon. We climbed up all the way to the ancient Acropolis just to admire the astonishing view and learned about the mysterious history of the place and the people who built it. Argos and its ancient theatre was our next stop. A representative of the mayor welcomed the participants and offered everyone a small welcome gift.

We had lunch in a fine traditional tavern in the area. With the delicious dishes following one after the other and the excellent local wine, this lunch will remain unforgettable to us all! The old traditional city of Nafplion was our last stop. The first capital of the Greek State, a city untouched by time, still living its own long history in the same alleys and castles. Some people preferred to explore the secrets of the traditional narrow alleys, others decided to sit by the seaside and enjoy the sun going down, some others put on their bathing suits and took a quick swim while some daring ones climbed all the thousand stairs up to the Venetian Fortress, just to admire the breathtaking view. One is for sure, everyone had a great time and we were all sorry to leave for Athens just around sunset.

Accommodation and dinners were arranged at Stanley Hotel for all participants. Stanley, a B-class Hotel centrally located with a roof garden bar and a swimming pool met the expectations of all participants. Its roof garden with the view of Athens by night, from the lighted Acropolis to the sea of Piraeus, hosted our spontaneous gatherings and parties throughout those 5 days. A wide dental exhibition including all kinds of dental material and equipment, accompanied all days of the scientific activities. Also an exhibition of childrens drawings related to dentists and dental students added a special smile to our congress.

Either attending the lectures or participating discussions, dancing at parties or joking with friends over delicious Greek dishes and music, either



Casper Bots performing the EDS song.

We stand together, together as one. together as one. United for ever, under Athens sun. Have an open mind, have an open heart. have an open beart. Every piece of Europe Every piece of Europe plays it's own part.

making friends or visiting the dental exhibition, exploring the traditional alleys of Plaka and the nearby islands or visiting the ancient monuments, this congress really brought us together. For five days, we lived in the "Europe of the Future" as we dream of it. Students from all Europe, from different countries, faculties, ways of life, were one. In a congress focussed on the student, we exchanged views and ideas, we discussed, we laughed and made friends, approached each others way of thinking, shared problems considering related not only to our science but to our society as a whole, and proposed solutions. Together we should stay, dreaming, working, acting for the Europe of the next century as we want it.

Nikos Mattheos, Greece President of the EDS



A number of participants at the gateway of Zappeion.

EDS TOWARDS THE YEAR 2000

The XVIIIth EDS Meeting, September 1996, Ljubljana, Slovenia

In September of the last year the XVIIIth EDS Meeting was held in the South-East of Europe. From August 31st till September 4th, 1996, eighteen delegates from the European countries were gathered in Ljubljana for this biannual meeting.

Ljubljana, capital of the Republic of Slovenia, welcomed the EDS delegates with open arms. The organizing student committee of the Dental Faculty (SIDSIC) had prepared a perfectly organized week full of official meetings and of course some social events in the evening. During their stay in Slovenia the EDS delegates noticed in particular the characteristic friendliness of the Slovenian people and the hospitality of the Dean and students of the dental faculty.

A very important subject during this meeting was the central theme "EDS towards the year 2000". This project had started in March 1996 and its most important aim was to improve the benefits of EDS for the individual dental students in the member states. In this constructive meeting the results of this project which had started in March of this year were worked out and evaluated. One of these results was the total revision of the EDS constitution. This constitution had been totally revised by the EDS constitution review committee. The goal of this new consti-



Lake Bled, Slovenia.

tution was to make the EDS more open to prospective members of the EU and to enable them to participate more effectively and with more responsibility in the organization of the European Dental Students.

In this way the EDS liked to play a role as a pioneer for the future United Europe. Therefore these countries (Slovenia and Norway) would receive a full vote in our organization. This total revisal of the constitution turned out to be a very tough point on the agenda with a lot of discussions and tired

delegates who lost all their energy in this subject!

Another subject of this project was the EDS Magline about which you can read elsewhere in this magazine. Also in this meeting in Ljubljana the final preparations for our second EDS

Congress were discussed. This congress would be held in Athens from the 1st till the 6th of October.

At the end of this meeting the elections for a new EDS Executive were held. Pieter van der Geld (The Netherlands) was elected again as EDS President for another half year. The new EDS Vice-President was Raul Minoves i Saban,es (Spain), who also is Chairman of the EDS Congress Organizing Committee 1998. As the new General Secretary Nikos Mattheos (Greece) was elected, who was also coorganizer of the 2nd EDS Congress in Athens '96. We were glad that the new Treasurer in the executive was a lady: Laura Ghibu from Sweden. And finally Casper Bots (The Netherlands) was elected as new editor for the EDS Magazine.



EDS delegates on the XVIIth EDS Meeting in Ljubljana, September 1996. Editor Casper P. Bots.

EDS IN A TURNING MILLENIUM

The XIXth EDS Meeting, March 1997, Bucharest, Rumania

In the beginning of March this year the XIXth EDS Meeting took place in Bucharest. The EDS delegates from all over Europe were gathered again to speak about the European ideas and to work constructively for the benefits of the dental students in the European member states.

For reasons of cost reduction this meeting was held together with the meeting of the International Association of Dental Students. The meeting began with a little festivity around the EDS Paper Award. The official certificate, a valuable elaborate standard book and eternal fame were presented to the happy British prize-winner Christopher Orr by the EDS President Pieter van der Geld. But also in this EDS Meeting there was a lot of work to do in a relatively short period of time, because there were 29 points on the agenda. The successful EDS Congress in Athens was evaluated, and the progress on the coming 3rd Congress in Barcelona was presented and discussed. We really could say that this coming 3rd EDS Congress was already looking very attractive (more details are elsewhere in this magazine).

The most important moment in this meeting was when the revised EDS constitution was accepted unanimously by the meeting. As aforesaid this new EDS constitution will open our organization for all dental students in Europe and in this way we will be able to serve even more the interests of the dental students in our member states.

Like the EDS constitutional revision, the EDS

Exchange Guide was another part of our main project "the European Dental Students towards the year 2000". This EDS Exchange Guide should contain all the necessary information for a student who wants to exchange with a foreign university in Europe. A preliminary booklet was presented during this meeting by the working group in expectation of a definitive edition for all European dental students.

Next to this the EDS delegates could enjoy the special Rumanian food and folkloristic songs during the evening. Of course the Rumanian singers were not the only people with a good feeling for music. Soon there was fierce competition from some EDS delegates who discovered their own unexpected talent for dancing and singing!

The meeting ended with the departure of the EDS President Pieter van der Geld (The Netherlands) because of his graduation in dentistry. The parting EDS President Pieter van der Geld, had been unanimously nominated for the EDS Honorary Life Membership, which he received out of the hands of the newly elected EDS president, Nikos Mattheos (Greece). Dejan Pirtovsec (Slovenia) was elected as the new EDS General Secretary. We wish the new EDS president and his executive good luck!

Pieter A.A.M. van der Geld, The Netherlands Editor

LETTER OF THE NEW EDS PRESIDENT

Dear friends.

It has only been a few months since our last meeting in Bucharest and many things have happened in the EDS!

The past few months since the EDS Meeting in Bucharest in March this year have been really productive for EDS. With the Executive Committee, which is in almost daily contact and has a very high level of communication among the delegates, progress is being made in all fields. Worthy of mention are the contacts we had with the European Sister Organizations AEGEE and EPSA (European Pharmaceutical Stu-

dents Organization) discussing ideas on joint activities like summer universities and promoting our common goals. We were also active with our first online Internet Meeting, the continuous upgrading of our Magline, and research for EU projects that can fund our activities.

The first exchange activities are already prepared. They will start with the visit of the Greek dental students to Granada (Spain) during this summer. In future many more events like this will be organized. The best is yet to come! There is still a lot to be done and little time to waste!

EDS with a new constitution and with enthustiastic people who like to work and have a lot of new ideas, is ready to face the challenge of our common future in the Europe of the next century. We, all dental students of EDS, have our own ideas, dreams, opinions and have to play an active role in the society as the scientists of tomorrow.

Let's stay together in this common effort, where every voice is welcome!

Nikos Mattheos, Athens (Greece) EDS President

EUROPEAN DENTAL STUDENTS EXECUTIVE COMMITTEE

President:

Nikos Mattheos Hadgichristou 8 11742 Athens Greece Tel: ++ 30 1 92 29 272 ++ 30 1 92 38 337 Fax: ++ 30 1 92 41 542

Email armitage@matrix.kapatel.gr

Vice President:

Raul Minoves Sabanes Avda. Carles III, 47-49 Esc. A 8o 1a 08028 Barcelona Tel: ++ 343 491 30 87 (personal) ++ 343 402 42 00 (faculty) Fax: ++ 343 402 42 (faculty) Email OU-AEOC@bell.ub.es

General Secretary - W.W.Web Editor

Dejan Pirtovsek c. 24. Junija 72 B SL-1231 Ljubljana Slovenia Tel: ++ 386 61 161 3304 Fax: ++ 386 61 133 3348 Email dejan.pirtovsek@mf.uni-lj.si

Treasurer

Laura Ghibou Hermelimsgatan 47 21567 Malmø Sweden Tel: ++ 46 40 85939 ++ 46 40 192684 Fax: ++ 46 40 85939 Email tym93lau@student.lu.se

Head Quarter EDS Headoffice

Dental Faculty
P.O. Box 9101
NL-6500 HB
Nijmegen

EDS Magazine Editor

A.C.T.A. faculty Casper P. Bots Postvak 8 Louwesweg 1 1066 EA Amsterdam The Netherlands Tel & Fax: Olger Meijering Vossendijk 189-V 6534 TS Nijmegen The Netherlands Tel: ++ 31(0)24-356 10 72 Email O.Meijering@student.kun.nl

Casper P. Bots
Orteliuskade 50 II
1057 AJ Amsterdam
The Netherlands
Tel: ++ 31 20 6162391
Email: C.Bots@acta.nl
++ 31 20 51 88 537

EDS Immediate Past President / Editor

Pieter A.A.M. van der Geld Eikenburglaan 29

5248 BJ Rosmalen The Netherlands Tel: ++ 31 73 52 14 224 Fax: ++ 31 73 52 21 000



High precision made by W&H

- Turbine handpieces
- Straight handpieces
- Contra-angle handpieces LT + A + E
- Air motors
- Scaler



From the dentist the skill the technology from W&H.



DENTALWERK



W&H Dentalwerk Bürmoos GmbH Austria, A-5111 Bürmoos

Postfach 1, Ignaz-Glaser-Str. 53 Telefon: + 43 / 62 74 / 62 36-0 Telefax: + 43 / 62 74 / 62 36-55 E-Mail: office@wnh.co.at

http://www.wnhdent.com

THIRD CONGRESS OF EUROPEAN DENTAL STUDENTS

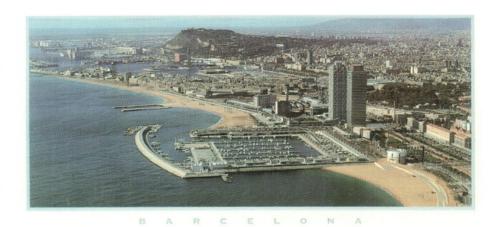
BARCELONA, SPAIN, OCTOBER 8-12, 1998

While the second succesful EDS Congress in Athens was being held, the new EDS Congress Committee in Barcelona was already busy organizing the third EDS Congress! These Spanish students have the ambition to

create an unforgettable experience with this EDS Congress for all participants. This congress will bring again all dental students in Europe closer together. And after the stories of your colleagues about the last EDS Congress, this will be an event you surely don't want to miss.

The speciality of this congress is that the organizing student committee is cooperating with the congress committee of the FDI (Fédération Dentaire International), who are organizing their congress at the same time as our EDS Congress. This cooperation will be a guarantee for a high scientific level of our EDS Congress. And it will give you the unique possibility to participate in the lectures of the most famous dental scientists from all over the world in one and the same congress.

Next to this heavy scientific part during the day, you can recover during a sparkling social programme at night. The fact that the social programme is organized by Spanish students is very promising. Because as you know, the Spanish students



are famous for their social events. This is an exceptional possibility for you to make individual contacts with your fellow students of all European nationalities.

Barcelona, the famous city of Gaudi, is well known for its architecture and cosy atmosphere. In this city you will encounter the typical way of living of the Catelonians which is the result of friendliness, civilisation and progress.

In short Barcelona is an intriguing city which offers a wide scale of activities for all kind of interests. Not without reason Barcelona was chosen as an Olympic City!

In this part of Spain the sun is still shining in October and the Mediterranian beaches with their palm trees are still attractive. These beautiful beaches are nearby because Barcelona is situated directly on the sea. Meanwhile in the rest of Europe autumn and winter are coming up.

The lodging will be in a four-star hotel which is just ten minutes walk from the Congress Palace and very near the railway station, where the train arrives from the airport.

And flying to Barcelona is very easy and cheap where-ever you are coming from. To make it even cheaper, for the flights a special arrangement has been made with IBERIA which will entitle congress participants to

a 50% reduction on the plane ticket. Finally, to give all European dental students a chance to attend this special event, the EDS Congress Committee will try to reduce the fees to an absolute minimum: The fee for a total package, wich will include participation in the scientific congress, participation in the social programme and hotel*** will be around 250 US\$.

Right now, the congress committee is working on the posters and the preliminary programmes. In a few months you will see them on the walls in your own faculty and the subscriptions can begin!

A last advice we can give you: BE THERE!

EDS Congress Committee, CoCo President:

Raul Minoves i Sabanes, EDS Vice President

Tel: ++343 402 42 00, Fax: ++343 402 42 12

Email: OU-AEOC@bell.ub.es

Pieter A. A. M. van den Geld, Editor



IADS: SUDAN VILLAGE PROJECT

The EDS would like to promote and encourage the "Sudan Village Project" of the International Dental Students Association.

This is a development project run by students, within the "Village Concept" framework of the World Health Organization. The activities are intersectorial – combining health, agriculture and education. The project is planned in close cooperation with the local rural community to ensure that the inhabitants' real needs are addressed.

The dental sector of this project will start in September 1997 and is sche-

duled to run for three years (until the end of 2000). The project area is in the Central State of Sudan, approximal 110 Km south of Khartoum. There are five villages with 25,000 inhabitants together.

The dental objectives are to prevent and control dental caries and periodontal diseases. Besides this, the aims of the project are also to help the villagers to improve their oral hygiene and to raise the dental educational level in community. The students participants will gain experience of primary oral health care in a developing country. Dental students from any school within the IADS in corporation with Sudanese students and villageres, will provide basic preventive and curative dental services. They will work with a dentist and other personnel at the health posts in the area.

The students will carry out several activities such as epidemiological research, primary prevention and educational programmes as well as performing actual treatement. They will also be actively involved in the ongoing evaluation of the project.

A rotation period lasts for three months. The newcomers spend the first week at the University of Khartoum, where they get orientation on the primary dental health care systems of Sudan and a course on tropical medicine. After the initial week the students start their work in the villages. There is a combined student house and office in the project area. This has newly been restored and has running water and electricity.

All the students having more than one year's clinical experience are welcome to join us. The participants must pay their travel expenditures and insurance themselves, but board an lodging in the village are free of charge. Attendance for the whole period of a rotation is compulsory. The application form must be sent three months prior to the planned rotation start.

Rotation dates:

15 Sept - 15 Dec 1997	1 Dec '97 - 1 Mar '98
15 Feb - 15 May 1998	1 May - 1 Aug 1998
15 July - 15 Oct 1998	1 Oct '98 - 1 Jan '99
15 Dec '98 - 15 Mar '99	1 Mar - 1 June 1999
15 May - 15 Aug 1999	1 Aug - 1 Nov 1999
15 Oct '99 - 15 Jan '00	1 Jan - 1 Apr 2000
15 Mar - 15 July 2000	1 July - 1 Nov 2000

Interested?

Please contact the International Coordinator for more detailled information about the project and an application form. Before you go to Sudan we will also provide you with prereading literature and a list of what to think about before leaving.

You can also find the "Sudan Village Concept": on Internet: http://www.unite.co.uk/customers/iads



A dental lecture for the Camp O, Sudan Village Project, IADS.

International Coordinator
Nikolaj Hansen
Nikolaj Hansen
Langesund 15, 2.tv
Langesund 26, 2.tv
DK 2100 Copenhagen
Tel: + 45 31 18 26 40
Tel: + 45 35 32 65 05
Fax: + 45 35 32 65 db.ku.dk
E-mail: Wenzel@stud.mdb.ku.dk

Local Coordinator

Local Coordinator

Mohamed F.A. Gadir

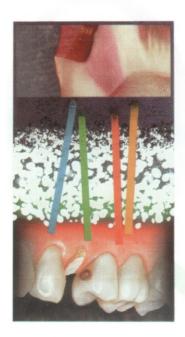
The faculty of Khartoum

PO Box 102, Khartoum

Sudan

The Best Way to Stay in Touch

)uintessence International



P. A. King K. E. Harley, et al

L. Hunter

H. Ulukapi F. Koray

B. Efes

W. H. Liebenberg B. J. Crawford

P. K. Vallittu

M. C. F. de Aquiar

D. W. Boston T. Mayer

T. Pioch H. Duschner, et al

M. C. R. B. Peters

Volume 28 January 1997

Quintessence International

A monthly journal that keeps the busy general practitioner current with advances in all areas of dentistry from all corners of the world. Couples timely research and clinical innovations with superb illustrations. Each issue offers a wide assortment of articles - including new findings in esthetic dentistry and new materials and techniques in all specialty areas - making it an excellent source for continuing education.

Ql's new look by 1996 is accompanied by regular features: 'Profile' presents a brief look at the lives and views of leaders in the dental field, and 'Current Concepts' is a question-and-answer forum addressing hot topics in dentistry.

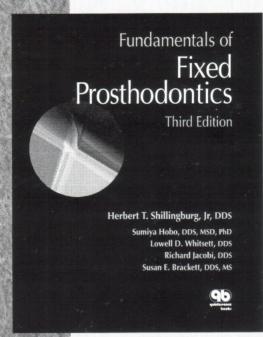
Editor: R.J. Simonsen, DDS, MS 12 issues/Year, Volume 28, 1997 Via Sea Mail £ 82 Via Air Mail £ 134

Order Form

Please send me		
Quintessence International (12 issues/Year)	□ via sea mail (£ 82)	
	□ via air mail (£ 134)
	,	
☐ Bill me ☐ Charge to my credit card ☐ VISA	MasterCard	☐ American Express
Card no.	Expires	Signature
Name (please print)		
Address		
City	State	Zip
Telephone		Fax
Prices subject to change without notice. All sale to all orders.	s are final. Ship	ping and handling charges will be added

Quintessence Publishing Co.Ltd. • 2 Blagdon Road • New Malden • Surrey KT3 4AD • UK •

Fax: +44 (0)181-336 1484



Fundamentals of Fixed Prosthodontics, 3rd ed.

Herbert T. Shillingburg, Jr, Sumiya Hobo, Lowell D. Whitsett, Richard Jacobi, and Susan E. Brackett

The third edition of this popular text has been painstakingly updated and greatly expanded to reflect the new research, materials, and techniques in fixed prosthodontics. The book brings readers up to date without sacrificing its emphasis on fundamentals. Practicing clinicians will find it an excellent source of reference and review.

All concepts and clinical procedures are clearly described and well-illustrated throughout; presentation of the material is enhanced by the larger page size of this edition. Includes new chapters on: all-ceramic restorations, esthetic considerations, treatment planning for single-tooth restorations, resin-bonded fixed partial dentures, and restoration of periodontally weakened teeth.

582 pp; 1,290 illus; ISBN 0-86715-201-X; US \$58

Dental Materials and Their Selection, 2nd ed.

William J. O'Brien

The revised edition of *Dental Materials and Their Selection* is designed to integrate the basic science and clinical aspects of dental materials by emphasizing structure and properties, as well as selection criteria. The expertise of over 20 contributors, combined with the book's innovative features, provides students, general practitioners, technicians, and specialists a useful overview of the evolving world of dental materials science and a guide to reliable materials selection.

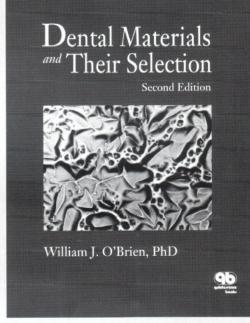
- Tree diagrams in each chapter show clearly the relationship between different types of dental products
- Decision-making scenarios duplicate real-life clinical situations
- Question-and-answer sections at the end of each chapter

Expires

- Glossaries and recommended reading in each chapter
- Discussion questions

Card no.

Over 40 quick-reference tables of physical and mechanical properties



434 pp (softcover); 235 illustrations ISBN 0-86715-297-4; US \$58

Order Form For fast service CALL TOLL FREE 800-621-0387 (within USA & Canada) or FAX 630-682-3288 http: ____ Fundamentals of Fixed Prosthodontics, 3rd ed. (201X) US \$58/copy ____ Dental Materials and Their Selection, 2nd ed. (2974) US \$58/copy NAME ____ ADDRESS ___ STATE ____ ZIP ___ ___ TELEPHONE ____ FAX ____ FAX ______ General practitioner _ Prosthodontist _ Dental Technician _ Other ______ Charge to my credit card plus shipping & handling _ VISA/MasterCard _ American Express _ Discover Card

Signature

Visit our web site http://www.quintpub.com





Quintessence Publishing Co, Inc 551 North Kimberly Drive Carol Stream, IL 60188-1881

CARIES DETECTION: TO DRILL OR NOT TO DRILL?

A part of our future as dentist will be drilling and removing infected, carious dentine. By doing so, the question is, are we just following our clinical experience, or are there any valid criteria to confirm that you have taken all the carious dentine

When can you really be sure and convinced, if you did your job properly and correct?

In this article I will explain more about caries and the background of caries removal. I hope, it will make you more aware of the reasons of your decisions and stimulate you to have a critical scientific attitude.

Fusayama has shown in 1976 that a caries lesion consists of four different layers:

- 1) a layer of destruction
- 2) a layer of infection
- 3) a layer of demineralization
- 4) a translucent zone

We should all agree that we want to remove the contaminated layer, layer one and two, because it cannot be remineralised anymore [1]. Layer three and four could remain, maybe it is even better for the protection of the pulp. To be sure, if all the infected dentine has been removed or if there is still something left, is very important.

In daily practice, three different criteria are accepted to decide if you have reached the excavation border, these are:

- register the hardness of the dentine
- region the discolouration of the dentine
- the possibility to stain the dentin with a dye

What is hard and what is not hard? Healthy dentine is about 69 KNH. Several researches have shown that many differences exist between the dentists. Remaining dentine had a hardness number of 28 KHN (±16.4). So, hardness is not valid because it depends from one dentist to the other, what is hard.

Distinguishing two types of caries is important: the acute and chronic caries. The discolouration and microbial front are, in case of chronic caries, very close to each other and related to the level of infection. Therefore it is a good clinical sign for caries removal [4,1]. On the other hand, in case of acute caries, discolouration is far beyond the microbial front and does not relate to the level of infection [5].

So, the criterions hardness and discolouration are not very reliable although they can be useful in some circumstances.



Caries lesion before staining.



Caries lesion after staining.



Another criterion is the possibility to stain the dentine with a caries indicator (a dye). I will explain some backgrounds, the composition, working mechanism, and practical applications.

Twenty five years ago, they have introduced a caries detector as another criterion to make your clinical decision valid. At first they thought that a caries detector stained the demineralized organic matrix (probably denatured collagen fibres) [1], which later appeared to be the layer that could be qualified as the irreversibly infected and demineralized dentine [7,8]. This infected, demineralized

Caries

part is stained red and that is exactly what we want to take away.

A caries detector consists of: 1% acid red, solved in propylene glycol. Acid red: C₂₄H₂₉O₇N₂S₂Na, propylene glycol: CH₃CHOCHCH₂OH.

If clinicians consider it important to render the enamel-dentine junction caries free, using the dye as an aid to might be prudent [8,9]. Research shows us that dentists were able to make 89% of the DEJ caries free, instead of 45% under normal circumstances [9].

A dye improves caries recognition and aids in teaching caries removal [9], that is why many faculties in Europe have decided to use a caries detector besides the other possibilities as hardness and discolouration. The practical daily use is to check yourself after the caries removal led by hardness and discolouration. One drop of caries detector stains the infected part red and shows if you have left any part. Most of the time, it is the DEJ that is still infected. Recent research shows that it might be possible that there is no clinical consequence to leave infected, demineralized dentine beneath a restoration [6].



Caries at the DEJ, easy to diagnose with caries indicator.

Facing all these things above I would like to conclude and say that caries indicator could be of good practical use. In practice, it makes it more easy for you to diagnose caries at the DEJ and helps you to be more sure about the decision you make.

Keep on drilling, thinking and making the "right" decisions.

Casper P. Bots, The Netherlands Editor

References

- 1. H.K. Yip, A.G. Stevenson, J.A. Beeley: The specificity of caries detector dyes in cavity preparation, Br Dent J 1994; 176: 417–421
- A.M. Kidd, D.N.J. Ricketts, D. Beighton: Criteria for caries removal at the enamel-dentine junction; a clinical and microbiological study, Br Dent J; 180: 287–291, 1996
- 3. David S. Shovelton: A study of deep carious dentine, 1968
- 4. Takau Fusayama, Koichi Okuse, Hiroyasu Hosoda: Relationship between Hardness, Discolouration and Microbial Invasion in Carious Dentin, J. Dent. Res, 1966, 1033-1046
- E.A.M. Kidd, S. Joysoton-Becahl, D. Beighton: Microbiological Validation of Assessments of Caries Activity during Cavity Preparation, Caries Res 1993:27:402-408
- D.W. Boston, H.T. Graver: Histobacteriological Analysis of Acid Red Dye-stainable Dentin Found beneath Intact Amalgam Restorations, Operative Dentistry, 1994, 19, 65–69
- 7. M.P. Rudolphy, J.P. van Amerongen, J.M. ten Cate: Radiopacities in Dentíne under Amalgam Restorations, Caries Res 1994; 28:240–245
- 8. A.M. Kidd, S. Joyson-Bechal, M.M. Smith, S.R. Smith: The use of a caries detector dye in cavity preparation, Br Dent J 1989; 167: 132
- C.B. Starr et al: Use of a Caries-disclosing Agent to Improve Dental Residents Ability to Detect Caries, Operative Dentistry, 1993, 18, 110-114

NEWS FROM...

THE EDITOR

This page is reserved for all kind of news and non-commercial information from the dental students in Europe. We want to keep the magazine interesting. That's why we are always searching for more and more information. So, don't hesitate to send your local magazine, interesting (students) research, pictures, letters, questions, experiences, in one word: EVERY-THING to the Editor or the EDS Head Office. You can always email, call or fax: C.Bots@acta.nl, faculty: +31 20 51 88 537 / private: +31 20 61 62 391.

SPAIN

The Spanish Federation of Dental Students (ANEO) has organized an annual Students Congress. This "5-days event" took place in July, in Granada. Many things were discussed in an interactive program. Discussions about dentistry, the education, differences between the faculties, new materials and instruments. Of course there was still time to celebrate the traditional "fiestas". Also this year they continued a good tradition: THE party! You can imagine what took place?! That is not all, they enjoyed the beach, sun, nights, and more.... For the first time in

history, seventeen dental students of Greece supported by the European Union, joined this inspiring and dynamic Congress. Everybody agreed that this Spanish Congress should be an example for the EDS Summer University, therefor the EDS members in Greece will investigate the possibility to organize the first EDS Summer University in July 1998. Don't forget to read more about it in the next EDS magazine!

THE NETHERLANDS

During the "National Congress Dentistry" in The Hague, April 17-19, 1997, an enthusiastic group of dental students have established the Dutch Dental Students Organization (SISOtandheelkunde). Right now, there are three dental faculties in The Netherlands, you can find them in Amsterdam, Nijmegen and Groningen. The first "SISOtandheelkunde Congress" will take place next year, April 1998. The Dutch students organization has good contacts with the Dutch Dentist Organizations (N.M.T. and the N.V.T.). The aim of SISO-tandheelkunde is to bring the Dutch students closer by organizing common activities and to find solutions for national dental education problems. The people from this organization

who work for the EDS will try to facilitate exchange in The Netherlands. The Committee of Recommendation consists of experienced people in the dental field, and will give the SISO committee advice wherever they need it.

More information? Please mail: siso-thk@dds.nl. The SISO head office is at the same address as the EDS head office.

DUTCHMAN NOMI-NATED HONORARY MEMBER OF EDS

In March the nineteenth International Meeting of the European Dental Students (EDS) was held in Bucharest. Here, following a unanimous resolution of the General Assembly, the departing EDS President Pieter van der Geld was presented with the certificate of the EDS Honorary Life Membership by his Greek successor Nikos Mattheos.

Mr. van der Geld had taken a very active part in the EDS since 1992; first for the EDS Head Office, then as Vice-President and since 1995 as President. Under his presidency the second EDS Congress was organized in Athens and new life was breathed into the EDS Magazine. Moreover he set a new course



Departing EDS
President Pieter van
der Geld (left)
being congratulated by the newly
elected EDS
President Nikos
Mattheos.

for the future by means of the project "EDS towards the year 2000" and he contributed to the thorough amendment of the EDS Constitution. Mr. van der Geld also instituted the EDS Paper Award in order to provide a strong incentive for dental research by the European dental students. Finally he introduced the EDS tie, which the Europen dental students can wear in order to symbolically tighten the bond between them.

Source: Dutch Dental Journal, NT 25th of April 1997

Internet Phone

Imagine yourself in front of your computer, drinking coffee and suddenly something is ringing. Your friend from some other side of the world is calling you through the Internet. You can talk with him in real time, if you have the camera you can even get his picture on your computer, and it is life. And the cost is only for your local call. I know it is hard to believe, but the world is changing into small global village. Go to https://www.vocaltec.com/iphone4/

THE WORLD OF COMPUTERS

EDS MAGLINE

Yes it is true! <u>EDS Association</u> has own WWW homepage. It is on this address:

http://www.sou.uni-lj.si/eds/.

You should check it out, because you will find there a lot of useful information and you can contact EDS members across Europe. Let your imagination explore the unknown world. See you on Internet!



Internet homepage of the EDS Association.

Real Audio

Have you ever thought about listening radio through the Internet. No? Yes? No problem. This is possible with the Real player from Progressive Networks. All you need is a sound-card and connection to the Internet, and fun can begin. You can listen to the radio, or you can chose your own music from the big music box list at several places on Net. And for wildlife lovers, you can listen to whale songs and birds singing in Amazonian wood. Go to

http://www.real.com/

ICQ - real chat

Have you wondered where are all your friends hiding on Internet and why you can never chat with them? The answer is here: the ICQ software. It is still beta version and is working only on Windows 95 platform, but is still very useful. It takes notice of you when your friends on your contact list are online, and you can easily send them a message, picture, file, or you can just chat with them. You wont be alone out there in Cyberspace. Go to http://www.mirabilis.com/

Cyberguru Superman

dejan.pirtovsek@mf.uni-lj.si

Blue underlined text indicates a link to the EDS MAGline Online Web site, and expanded coverage. Look for more information at... www.sou.uni-lj.si/eds/

z

ш

٥

Ш Т Т JRGER HALF T A

Z Ъ ×

TETICS

×

ш

S

S















For information please contact:

DENTAL

International Headquarters: Institut Straumann AG CH-4437 Waldenburg, Switzerland Phone (+41) 61-965-11-11 Fax (+41) 61-965-11-01

ITI® Dental Implant System is a registered trademark of Institut Straumann AG, Switzerland

Welcome to a New World

Artglass® and 2 bond 2®, the system for metal free Polyglas® crowns and more ...

Heraeus

Open the doors to new technology and leave the old behind.

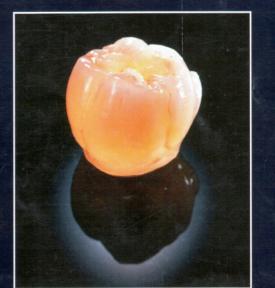
2 bond 2 is a universal luting medium with familiar handling characteristics; together with Solid bond, indirect restorations can be seated in just a few procedure steps with extremely strong adhesive retention.

- easy application
- radiopaque
- caries protection by fluoride release
- for metal supported and metal free restorations

Metal free Polyglas crowns and bridges, as well as inlays, onlays and veneers provide your patients with

- best esthetics
- minimal invasive tooth preparations
- restorations made from material similar to natural tooth structure
- one single material for all restorations

Join the new world of fascinating dentistry with Artglass and 2 bond 2.



Kulzer:

Heraeus Kulzer GmbH Bereich Kulzer Philipp-Reis-Straße 8/13 D-61273 Wehrheim / Ts.