Minutes of the 20th Annual Meeting of the Canadian National Committee of CIE

(Held in the Physics Building,
National Research Council, Ottawa
7 November 1975)

Present

Members: Prof. M.G. Bassett (University of Toronto)
Mr. W. Budde (National Research Council), President
Mr. J.M. Chorlton (Harjohn Industries)
Mr. G.F. Dean (Consulting Engineer, Toronto)
Mr. D.W. Frick (Canadian Broadcasting Corporation)
Mr. A. Ketvirtis (Foundation of Canada)
Mr. S.W. McKnight (Canadian Westinghouse)
Dr. A.R. Robertson (National Research Council), Secretary
Dr. C.L. Sanders (National Research Council)
Mr. C.W. Shearer (Canadian Broadcasting Corporation)
Mr. Z.S. Subotich (Canadian Standards Association)
Dr. G. Wyszecki (National Research Council)

Guests: Mr. B.N. Clarkson (Philips Electronics Industries)
Mr. W.L. Hawley (Powerlite Devices)
Mr. V. McCullough (Ministry of Transport and Communications, Ontario)
Dr. H.F.L. Pinkney (National Research Council)

Absent

Members: Mr. G.E. Davidson (Ontario Hydro)
Mr. F.R. Dorward (Angus-Butler Engineering)
Mr. D. Hoogeveen (Saskatchewan Power)
Dr. P.K. Kaiser (York University)
Dr. P. Manning (Nova Scotia Technical College)
Dr. J.D. Moreland (University of Waterloo)
Mr. G.E. Mulvey (Mulvey Engineering)
Mr. A.T. Orr (Orcons)
Mr. G.L. Snider (British & Overseas Imports)
Mr. J.C. Wilson (Wilson Lighting)

1. Call to order and approval of agenda

The President opened the meeting at 10:05 a.m. The tentative agenda was approved with the addition of an extra item "Report from Canadian members of CIE Executive Committee".

2. Minutes of 19th Annual Meeting

The Secretary read the minutes of the 19th Annual Meeting. Dr. Sanders moved their approval, Mr. Frick seconded, and the motion was carried unanimously.

3. Secretary's report

The Secretary read his report which is attached to these minutes. The report was approved unanimously on a motion by Mr. Shearer, seconded by Mr. Chorlton.

4. Business arising from the minutes and the Secretary's report

The President reported that he had sent the questionnaire on "Lighting Research in Canada" to various organizations, consultants, and others and had received 112 replies. He had given a preliminary evaluation of the first 70 replies at the Canadian Regional Conference of the IES in June. A frequent comment was that a lighting institute in Canada should provide education as well as research facilities. The President agreed to circulate the results of the survey to members of the CNC/CIE, to prepare a final memorandum, and to submit it to the Science Council of Canada.

Dr. Wyszecki mentioned an extension course given at McGill University under the auspices of the Canadian Association of Textile Chemists and Colorists and suggested that this could be a model for education in illuminating engineering. Prof. Bassett said that it was important that such a course should lead to a certificate of some sort that would be recognized as a significant qualification.

5. Report from Canadian members of CIE Executive Committee

The President presented the report, which is attached to these minutes. In explaining item 2(ii), he commented that some papers in the open literature were based on CIE work and should be given some official status.

Mr. Ketvirtis congratulated Dr. Wyszecki on his appointment as Chairman of the Action Committee.

Dr. Robertson, commenting on item 4.5, said that in his opinion the next CIE Session should be held in Japan even if a South African delegation could not attend. He said that the Japanese had contributed a lot to the work of the CIE and it would be unfortunate if the meeting could not be held there because of racial problems. The majority of the Committee felt, on the other hand, that since the CIE was undoubtedly a technical organization, politics should be kept out of it and that the meeting should not be held in Japan unless a South African delegation could take part.

6. Discussion of reports from delegates to CIE Technical Committees

The delegates to Technical Committees 1.2, 1.3, 1.5, 2.2, 2.3, 2.4, 3.1, 3.2, 4.1, 4.3, 4.4, and 4.6 and Study Groups D and E presented their reports which are attached to these minutes. Reports from the delegates to TC-1.4, TC-4.7, SG-A and SG-C were received after the meeting and are also attached to these minutes.

The delegates from TC-1.6, 3.4, 3.5 and 4.8, and SG-B had nothing to report, having been unable to attend any meetings.

No reports were available from TC-1.1, 2.1, 3.3, 4.2 and 4.5.

The following additional comments were made:

TC-1.5: It is difficult to make progress under the present chairman.

TC-1.6: This Committee is very active and held meetings in Ottawa and London. Dr. Robertson attended the Ottawa meetings.

TC-3.1: This Committee may be moving too quickly to a definitive report. There is still a lot of research to be done.

TC-4.6: Ontario is planning to change to the luminance method of assessing street lighting.

TC-4.7: The "city beam" may not be suitable for Canada because of the frequent transitions from good street-lighting to no street-lighting.

7. Discussion of 18th Session of CIE (London, September 1975)

Several members felt that the registration fee (£65) was too high. Mr. Dean did not think that delegates should be obliged to pay for a copy of the proceedings.

Mr. Budde and Mr. Shearer commented, with general agreement, that the Session was extremely well organized. The large registration area with pigeon-holes for each delegate and many small tables for informal discussions were particularly appreciated, as were the knowledgeable and helpful stewards.

The simultaneous translation facilities were thought to be useful and worth the high expense. Dr. Wyszecki suggested that written translations available in advance might be cheaper.

Dr. Sanders suggested that the program of the Session should be available earlier to Technical Committee chairmen to enable them to choose appropriate dates for pre- and post-session meetings.

Dr. Robertson said that the CNC/CIE should not suggest a lower registration fee without indicating how the cost of the Session could be reduced. Dr. Wyszecki suggested that a lower fee could be charged to delegates who wished to attend only part of the Session.

The usefulness of the "Coordinators' Reports" sessions was discussed. The general feeling was that they were useful but should be shorter.

Mr. Ketvirtis suggested that the CNC/CIE should invite the CIE to hold a Session in Canada, but most members felt that this would involve too much work and too much expense.

8. Appointments and Reappointments

The following decisions were made regarding delegates to CIE Technical Committees:

TC-1.1 (Definitions and Vocabulary) G.E. Davidson re-appointed.
TC-1.2 (Photometry and Radiometry) C.L. Sanders re-appointed.
TC-1.3 (Colorimetry) G. Wyszecki resigned. A.R. Robertson appointed.
TC-1.4 (Photopic, Mesopic and Scotopic Vision) P.K. Kaiser re-appointed.
TC-1.5 (Fundamentals of Lighting Calculations) M.G. Bassett re-appointed.
TC-1.6 (Fundamentals of Visual Signalling) J.D. Moreland re-appointed.
TC-2.1 (Sources of Visible Radiation) and TC-2.2 (Sources of UV and IR Radiation) have been combined as TC-2.1 (Sources).
Former delegates: F.R. Dorward and W. Budde.
New delegate: F.R. Dorward, subject to his approval.
TC-2.2 (New) (Detectors and Radiometric Instruments) W. Budde appointed.
TC-2.3 (Materials - methods of measuring characteristics) W. Budde re-appointed.
TC-2.4 (Luminaires) M.G. Bassett resigned. Z.S. Subotich appointed.
TC-3.1 (Visual Performance) J.M. Chorlton re-appointed.
TC-3.2 (Color Rendering) A.R. Robertson re-appointed.
TC-3.3 (Physical Environment) Mr. Dean to investigate whether G. Mulvey has time to continue. If not, Mr. Dean will approach A.W. Henschel.
TC-3.4 (Discomfort Glare) J.M. Chorlton re-appointed.
TC-3.5 (Lighting and the Environment) P. Manning re-appointed.
TC-3.6 (Lighting and Architecture) Vacant. To await P. Manning's report from SG-B.
TC-3.7 (Photobiological Effects) D. Hoogeveen appointed, provided he is still interested and able to be active. Mr. Clarkson to investigate.
TC-4.1 (Interior Lighting) G.F. Dean re-appointed.
TC-4.2 (Daylighting) D. Stephenson, Division of Building Research, NRC, appointed.
TC-4.3 (Lighting for Stage and Studio) Discontinued.
TC-4.4 (Sports Lighting) S.W. McKnight re-appointed.
TC-4.5 (Exterior Lighting) B.N. Clarkson appointed.

Dean Letter 76.03.05 on 1459-25 Mulvey to continue

76.04.02 on 1459-25-34 Hoogeveen accepts

TC-4.6 (Street Lighting) A. Ketvirtis re-appointed.
TC-4.7 (Automobile Lighting) G.L. Snider or H.F.L. Pinkney. Mr. Budde to talk to Mr. Snider to see if he wishes to continue.
TC-4.8 (Airborne Lighting and Signals) B.D. Cobley resigned. Mr. Budde to contact Air Traffic Control Branch, Ministry of Transport, for possible new delegate.
TC-4.9 (Cost-Benefit Relationships) A.T. Orr appointed.
TC-4.10 (Mine Lighting) F.R. Dorward appointed, subject to his approval.
SG-A (Psychological Problems in Lighting) Combined with TC-3.5.
SG-B (Lighting and Architecture) Becomes TC-3.6.
SG-C (Cost-Benefit Relationships in Lighting) Becomes TC-4.9.
SG-D (Computers in Lighting) Discontinued.
SG-E (Non-Sensory Effects of Optical Radiation) Becomes TC-3.7.
SG-F (Photochemical and Agricultural Applications) B.N. Clarkson appointed.

Four members, D.W. Frick, C.W. Shearer, J.C. Wilson, and G. Wyszecki, who are not delegates to CIE Technical Committees, were re-appointed as members of the CNC/CIE.

Prof. Bassett proposed and Mr. Ketvirtis seconded that Dr. H.F.L. Pinkney be appointed a member of the CNC/CIE. This was approved unanimously. Dr. Robertson proposed and Mr. Dean seconded that Mr. D.S. Gordon of British Columbia Hydro be appointed a member of the CNC/CIE subject to his approval. This was also approved unanimously.

It was suggested that Mr. G.H. Cornish, Commissioner of Planning and Transportation, City of Calgary, and Mr. C. Labrecque, Holophane, should be appointed members of the CNC/CIE. Mr. Dean agreed to discuss this with Mr. Cornish and Dr. Robertson agreed to approach Mr. Labrecque.

Mr. Budde explained that he would not accept a re-appointment as President and proposed, seconded by Mr. Subotich, that Prof. Bassett be recommended to the National Research Council as President of the CNC/CIE for a four-year term beginning 1 January 1976. This was approved unanimously.

Mr. Budde explained that he would not have been able to perform his duty as President without the cooperation and efficient help of the Secretary of the CNC/CIE. He expressed his thanks to Dr. Robertson.

Dr. Wyszecki proposed and Mr. Frick seconded that Mr. Budde be appointed Vice-President of the CNC/CIE. Dr. Sanders took over the chair while this was approved unanimously.

Mr. Budde proposed and Mr. Frick seconded that Dr. Robertson's re-appointment as Secretary of the CNC/CIE be recommended to the National Research Council. This was approved unanimously.

The Committee voted unanimously to recommend to the National Research Council that Mr. W. Budde, Mr. F.R. Dorward, Mr. D.W. Frick, and Dr. P. Manning be re-appointed to the Executive Committee of the CNC/CIE in addition to Prof. Bassett and Dr. Robertson.

Prof. Bassett and Mr. Budde were appointed as the Canadian members of the CIE Executive Committee.

9. Other Business

Dr. Wyszecki moved that Mr. Budde be thanked for his accomplishments during his eight years as President. This was approved by acclamation.

10. Adjournment

There being no further business, the meeting was adjourned at 4:00 p.m.

A.R. Robertson
Secretary

Secretary's Report to the Canadian National Committee of the CIE

November 1975

1. The 1975 annual dues of $1100 (US) for Canadian membership of the CIE were paid by the National Research Council in January 1975.

2. The CIE has proposed an increase of 10% in the annual dues each year for the next four years. The National Research Council has been requested to pay the increased dues on behalf of the CNC/CIE.

3. Sales of CIE Publications by the NRC Publications Distribution Office continue to increase, as shown in the attached table. A notice listing the available publications was published in the CSA Quarterly Review in August 1975. In addition, the US National Committee has agreed to include the Canadian source in publicity notices sent to US technical journals since most of these journals are available equally in Canada.

4. Until 1 April 1975 CIE Publications were purchased from the Central Bureau by the Canada Institute for Scientific and Technical Information (CISTI) and passed on to the NRC Publications Distribution Office for sale. On that date, CISTI separated from NRC and since then has been unwilling to make the purchases. Attempts are therefore being made to find an alternative source of funds or to find a way of using the money from sales to finance new purchases.

5. New By-Laws and Terms of Reference of the CNC/CIE were prepared along the lines worked out at the last CNC/CIE meeting. The By-Laws were approved by the members in August 1975 and the Terms of Reference have been submitted to NRC for approval. Under the new arrangement, NRC deals only with the Executive Committee of the CNC/CIE and has approved the following members for terms ending 31 December 1975:

   W. Budde
   F.R. Dorward
   D.W. Frick
   C. Gauvreau (ex-officio)
   P. Manning
   A.R. Robertson
   C.L. Sanders
   G. Wyszecki

6. Sixteen delegates from Canada attended the 18th General Session of the CIE in September 1975. They were:

   M.G. Bassett
   W. Budde
   G.H. Cornish
   G.F. Dean

D.S. Gordon
R.E. Jennings
P.K. Kaiser
A. Ketvirtis
S.W. McKnight
N. Ohta
H.F.L. Pinkney
A.R. Robertson
C.L. Sanders
C.W. Shearer
G.L. Snider
G. Wyszecki

Papers were presented at the Session by W. Budde and by A.R. Robertson. A meeting of the delegation was held in London on 15 September 1975. The proposed changes to Technical Committees and the proposed new Officers of the CIE were discussed.

7. Thirteen photographs were submitted to the CNC/CIE for exhibition at the 18th Session. Eight of these were selected by the Officers of the CNC and were included in the exhibition.

8. During the year, the President wrote several letters in support of individual members who wished to attend the 18th Session and requesting the participation of other persons who were not members of the CNC/CIE.

9. In December 1975, a request was received from the Illuminating Engineering Institute of Japan for photographs of lighting facilities in Canada. This request was forwarded to G.F. Dean, Canadian member of TC-4.1 (Interior Lighting).

10. The "CIE Statement on Energy Conservation and Lighting" was sent in May 1975 to the NRC Public Information Branch which distributed it to newspapers throughout Canada.

11. CIE TC-1.6 (Fundamentals of Visual Signalling) held a 2-day meeting in Ottawa on 31 July and 1 August 1975. This was the first time that a CIE Technical Committee had met in Canada.

A.R. Robertson
Secretary
CNC/CIE

Sale of CIE Publications by NRC Publications Distribution Office

		Price ($)	Sales* 1973-74	Sales* 1974-75	In Stock** 6.10.75
2.2	Colors of Light Signals	11.00	-	9	6
8	Street Lighting & Accidents	2.00	0	9	1
13.2	Colour Rendering	10.00	-	11	4
15	Colorimetry	6.00	14	15	49
15/1	Special Metamerism Index	1.50	6	3	169
16	Daylight	5.00	-	8	3
17	International Lighting Vocabulary	22.00	18	10	-2
18	Principles of Light Measurements	3.50	12	15	-8
19	Visual Performance	4.00	13	8	1
20	Spectral Distribution of Solar Radiation	6.00	3	10	12
21A	1971 Proceedings, Vol. A	32.00	1	0	0
21B	1971 Proceedings, Vol. B	21.00	1	0	2
22	Luminance Distribution of Clear Skies	6.00	8	11	1
23	Motorway Lighting	7.00	2	22	26
24	Photometry of Luminaires with Tubular Fluorescent Lamps	11.00	8	7	5
25	Photometry of Discharge Lamps	3.00	13	5	-5
26	Tunnel Lighting	8.00	5	6	-1
27	Photometry of Luminaires for Street Lighting	7.00	8	12	0
28	Lighting of Sports for Colour TV	6.00	-	13	2
29	Guide on Interior Lighting	4.00	-	-	-
	Total sales		112	174	
	Total value		$939.00	$1,248.00	

* Includes some copies distributed for no charge.

** Negative numbers indicate orders received that cannot be filled at present.

Report by the Members of the CIE Executive Committee

1. A message from the CIE President was received concerning the nomination of new officers of the CIE. For President, Mr. S.K. Guth was nominated by Mr. Stevens. Further nominations for President, Honorary Secretary and Honorary Treasurer were requested. This letter was distributed to the members of the CNC but no nominations were received.

2. In reply to a request for items to be discussed by the CIE Executive Committee at the London meetings, Mr. Budde wrote a letter to Mr. Maisonneuve suggesting that the following two items be discussed:

   (i) Registration Fees for General Sessions
   (ii) CIE Publications

3. A letter from the CIE President was received with the following nominations for Vice-Presidents:

   Prof. J.B. de Boer
   Prof. L. Morren
   Dr. K. Yoshié

   Also proposed were

   Dr. J. Terrien for Treasurer
   Dr. B. Steck for Honorary Secretary

4. Two meetings of the CIE Executive Committee were held at London. The following items were discussed.

   4.1 Mr. Maisonneuve is replaced as Deputy Secretary by M. Lemaigre-Voreaux.

   4.2 Reports were presented by Prof. A. Lompe, Honorary Secretary, on the activities of the Central Bureau and by the Treasurer, Mr. Wakefield, on the CIE Finances. The Treasurer's report indicated an increase in the Cash balance for the last three years with an actual balance of $59,821.00 at the end of 1974. However, a decrease is now anticipated and therefore an annual increase of the membership dues by 10% compounded for the next four years was proposed in order to meet increasing costs. This was justified by the fact that the fees had remained unchanged for the last 8 years. The Executive Committee approved this increase which, however, has to be approved by the National Committees.

4.3 Dr. Guth, Chairman of the Action Committee, gave a report and presented a "Proposal for the Assignment of Technical Committees and Study Groups to National Committees". According to this proposal Canada keeps TC-1.2 Photometry and Radiometry but loses TC-1.3 Colorimetry.

4.4 The final draft of the new Statutes and By-Laws, which had been distributed in March 1975, was approved.

4.5 In the discussion on the place of the next general Session the invitation by the Japanese National Committee was considered. A difficulty arose when it became apparent that no official delegation from South Africa would be admitted to Japan because of racial problems. The President of the CIE expressed the opinion that an invitation from a country could not be accepted if delegates from any other country would not be admitted. He asked for the approval of this attitude. Dr. Yoshié, Japan, promised that great efforts are made to resolve this difficulty and consequently the Japanese invitation was accepted on the condition that a South African delegation would be admitted.

At this occasion Prof. Oleszinski, Poland, presented an invitation to hold the 1983 General Session in Warszaw, Poland.

4.6 The following new officers of the CIE were elected.

President:	Dr. S.K. Guth, U.S.A.
Treasurer:	Dr. J. Terrien, France
Secretary:	Dr. B. Steck, Germany
Vice-Presidents:	Dr. K. Yoshié, Japan
	Prof. L. Morren, Belgium
	Prof. J.B. de Boer, Netherlands
	Prof. T. Oleszinski, Poland
	Dr. G. Wyszecki, Canada

Dr. Guth, as incoming President, presented Dr. Wyszecki as the new Chairman of the Action Committee.

4.7 In the item "General Discussion on CIE Affairs" the two subjects proposed in the above mentioned letter (see item 2) were discussed.

The proposal to allow daily fees or fees for shorter periods than the full session will be discussed by the new Board of Administration.

The proposal to establish a list of papers published in scientific journals and having a strong relation to CIE work will be forwarded to the Action Committee.

W. Budde
G. Wyszecki

Canadian National Committee of CIE

President:	W. Budde	TC-2.2, TC-2.3
Vice-President:	C.L. Sanders	TC-1.2, SG-E
Secretary:	A.R. Robertson	TC-3.2
Executive Committee:	F.R. Dorward	TC-2.1
	D.W. Frick	-
	P. Manning	TC-3.5, SG-B
	G. Wyszecki	TC-1.3
Members:	M.G. Bassett	TC-1.5, TC-2.4
	J.M. Chorlton	TC-3.1, TC-3.4
	B.D. Cobley	TC-4.8
	G.E. Davidson	TC-1.1
	G.F. Dean	TC-4.1
	D. Hoogeveen	SG-E
	P.K. Kaiser	TC-1.4, SG-A
	A. Ketvirtis	TC-4.6
	S.W. McKnight	TC-4.4
	J.D. Moreland	TC-1.6
	G.E. Mulvey	TC-3.3
	A.T. Orr	SG-C
	C.W. Shearer	TC-4.3
	G.L. Snider	TC-4.7
	Z.S. Subotich	SG-D
	J.C. Wilson	-

The CNC/CIE is not represented on TC-4.2 or TC-4.5

(August 1975)

CIE Technical Committees

Committee Number	Title	Country	Chairman	Canadian Member	NRC File No.
TC-1.1	Definitions & Vocabulary	France	Terrien	Davidson	1459-25-9
TC-1.2	Photometry & Radiometry	Canada	Sanders	Sanders	1459-25-5
TC-1.3	Colorimetry	Canada	Wyszecki	Wyszecki	1459-25-2
TC-1.4	Photopic, Mesopic & Scotopic Vision	USA	Kinney	Kaiser	1459-25-4
TC-1.5	Fundamentals of Lighting Calculations	France	Dourgnon	Bassett	1459-25-25
TC-1.6	Fundamentals of Visual Signalling	USA	Douglas	Moreland	1459-25-10
TC-2.1	Sources of Visible Radiation	Japan	Nakaji	Dorward	1459-25-19
TC-2.2	Sources of UV and IR Radiation — DETECTORS	Germany	Schulze	Budde	1459-25-12
TC-2.3	Photometric Characteristics of Materials	Germany HUNGARY	Krochmann SCHANDA	Budde SUBOTICH	1459-25-13
TC-2.4	Luminaires	Denmark	Frederiksen	~~Bassett~~	1459-25-14
TC-3.1	Visual Performance	USA	Blackwell	Chorlton	1459-25-11
TC-3.2	Color Rendering	Germany	Munch	Robertson	1459-25-3
TC-3.3	Fundamentals of Physical Environment	Netherlands		Mulvey	3-3-I-103-25
TC-3.4	Discomfort Glare	Australia	Lowson	Chorlton	1459-25-24
TC-3.5	Lighting & the Environment	UK	Hewitt	Manning	1459-25-15
TC-4.1	Interior Lighting	UK	Dykes-Brown	Dean	1459-25-20
TC-4.2	Daylighting	Belgium	Dogniaux	~~Steenmann~~	1459-25-26
TC-4.3	Lighting for Stage & Studio	UK	Ackerman	Shearer	1459-25-16
TC-4.4	Sports Lighting	Germany	Wald	McKnight	1459-25-22
TC-4.5	Exterior Lighting	Italy	Grandi	~~Clarkson~~	1459-25-21
TC-4.6	Street Lighting	Netherlands	de Boer	Ketvirtis	1459-25-17
TC-4.7	Automobile Lighting	France	Devaux	Snider	1459-25-1
TC-4.8	Airborne Lighting & Signals	France	Heynemann	Cobley	1459-25-18
SG-A	Psychological Problems in Lighting	Sweden	Hesselgren	Kaiser	1459-25-27
SG-B	Lighting & Architecture	South Africa	Gow	Manning	1459-25-27
~~SG-C~~	Cost-Benefit Relationships in Lighting	Czechoslovakia	Svehla	Orr	1459-25-27
SG-D	Computers in Lighting	France	Barthes	Subotich	1459-25-27
~~SG-E~~	Non-Sensory Effects of Optical Radiation	USA	Thorington	Hoogeveen ~~Sanders~~ Dorward	1459-25-27

4.10 Mine Lighting

SGF Photochemical + Agric Appl. of Optical Radiation CLARKSON

(August 1975)

SUBCOMMITTEES OF CANADIAN NATIONAL COMMITTEE OF CIE

1.1 Definitions and Vocabulary

G. E. Davidson (Chairman)
All members and delegates

1.2 Photometry & Radiometry

C. L. Sanders (Chairman)
W. Budde
G. E. Davidson
A. R. Robertson

1.3 Colorimetry

G. Wyszecki (Chairman)
W. Budde
A. R. Robertson
C. L. Sanders

1.4 Photopic, Mesopic and Scotopic Vision

P. K. Kaiser (Chairman)
P. Hallet
D. G. Pearce
J. D. Moreland
G. Wyszecki

3.1 Visual Performance

J. M. Chorlton (Chairman)
M. G. Bassett
G. F. Dean
F. R. Dorward
A. W. Henschel
P. K. Kaiser
C. Labreque

3.2 Color Rendering

A. R. Robertson (Chairman)
D. H. McRae
C. L. Sanders
G. Wyszecki

4.1 Interior Lighting

G. F. Dean (Chairman)
W. M. Dillon
F. R. Dorward
A. W. Henschel
D. E. Macpherson
P. Manning
A.C.T. Robinson
R. Shortreed

4.1 Mine Lighting (Subcommittee)

F. R. Dorward (Chairman)
G. K. Brown
D. Hemmings
S. Homulos
A. L. Job
W.V. McKnight

4.3 Lighting for Stage and Studio

C. W. Shearer (Chairman)
D. R. Gillson
J. H. Kluge

4.4. Sports Lighting

S. W. McKnight (Chairman)
C. J. Courtney
G. F. Dean
D. S. Gordon
A. Lafontaine
T. Nutt

4.6 Street Lighting

A. Ketvirtis (Chairman)
V. McCullough
S. W. McKnight
H. D. Nicholson
C. Rose
E. C. Rowsell

4.7 Automobile Lighting

G. L. Snider (Chairman)
P. E. Brudy

(August 1975)

Canadian National Committee of CIE

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CNC/CIE Report on TC-1.2,
Photometry and Radiometry

November 1975

by C.L. Sanders

1. A survey on Calibration Facilities for Photometry and Radiometry was made by C.L. Sanders, NRC, early in 1975. A draft report has been circulated to the 25 responding laboratories for approval before an NRC Physics Division report is issued and circulated.

2. A draft report on Rating Photometers was prepared by C.L. Sanders, NRC, and discussed in some detail in London. The next draft will be prepared on the basis of those discussions and on written comments.

3. The international comparison of spectral irradiance scales is completed by ETL, Japan. The agreement is within ±1% in the visible but deteriorates to ± 3% and ± 3% at 800 nm and 300 nm respectively. NRC will base its measurements on the international mean scale.

4. The detector subcommittee agreed on the plans for a comparison of measurements of spectral sensitivity and linearity of silicon diodes to be organized by Budde, NRC, its chairman.

5. A paper by Steiner, NBS, giving the available data on properties of secondary standards was given in London. The subcommittee will further investigate some of the sources under Moore, NPL, the new chairman.

6. Some revision of the working program of TC-1.2 is expected to result from the suggestions made to the CIE Action Committee. The work described in 2 and 4 above is expected to go to a new Technical Committee on "Detectors and Photometers" under Schanda of Hungary. The subcommittee on Reflection of White Materials will go to TC-2.3, "Photometric and Radiometric Properties of Materials" under Franc Grum, U.S.A.

7. A draft report on Spectroradiometry of Fluorescent Lamps prepared by Bauer, Jones and Schanda was discussed in London. The next draft will be prepared by Jones, NPL. It will be modified to give a general treatise and have appendices dealing with special problems associated with particular sources.

8. The Consultative Committee on Photometry and Radiometry of the International Committee on Weights and Measures decided to recommend that the basic unit of photometric measurements should

be a fixed numerical relationship between the lumen and the watt for one particular frequency. The value will be decided in September 1977. This will replace the blackbody at the freezing point of platinum.

9. On the basis of this redefinition, the Technical Report CIE 18 will be revised under subcommittee chairman Blevin, NML, Australia. His proposed outline was approved in London.

10. A comparison of measurements on High Pressure Mercury Vapour lamps will be organized by Poppe, Hungary.

11. A comparison of measurements on green and red light emitting diodes will be organized by Schanda, Hungary.

12. A comparison of measurements of spectral transmittance of glass filters organized by Fillinger, Hungary, and discussed by TC-1.2 will be transferred to TC-2.3.

CNC/CIE Annual Meeting
7 November, 1975

Re: TC-1.3 (Colorimetry)

In the last year TC-1.3 held meetings on September 8, 9, 15, and 16 at London, England. The September 15 meeting was the official meeting of TC-1.3 during the CIE Session, the September 16 meeting was a joint meeting with the other committees (TC-1.1, TC-1.2, TC-1.4, and TC-2.3) of the CIE Group I Committees. The September 8 and 9 meetings were presession meetings held to prepare for the main meeting a week later.

TC-1.3 works in subcommittees on the following subjects: color-difference evaluations, standard sources, metamerism, chromatic adaptation, whiteness, and terminology.

The following decisions were reached at the London meetings:

1) Two color-difference formulae are to be recommended for use in colorimetry.

2) A German proposal is to be studied which aims at a quantitative assessment of the suitability of light sources for colorimetry.

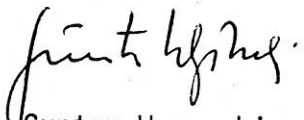
3) The subcommittee on metamerism has been temporarily dissolved until further research on metamerism is made.

4) A working program for chromatic adaptation has been drafted.

5) The work done by the subcommittee on whiteness is to be published in a series of papers written by the members of the subcommittee.

6) The subcommittee on terminology will produce its first draft of colorimetric terms for the anticipated 4th edition of the CIE Vocabulary.

The CIE Action Committee has taken steps to transfer the chairmanship of TC-1.3 from Canada to Great Britain.



Gunter Wyszecki
Former Chairman
of TC-1.3

UNIVERSITY OF TORONTO
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ANNUAL REPORT 1974 - 1975.

CIE COMMITTEE TC-1.5, FUNDAMENTALS OF LIGHTING CALCULATIONS

A pre-session meeting of this Committee was held on Sept.9th. The document," Recommendations for Basic Calculation of Whole Average Illuminances on the Working Plane and on the Surfaces of an Enclosed Space Using Artifical Lighting from Symmetrical Luminaires", was finalized after the meeting in Leicester, England last year and is now ready for publication. Mr. A. B. deGraaff of the Netherlands presented some work he had been asked to do by the Committee on the practical applications of the basic method and considerable discussion took place.

At the sessional meeting of the Committee the Report and Mr. deGraaff's work were presented and discussed. It was felt that this Report would be useful to the countries who are not presently committed to their own national method.

The future of this Committee is presently under review by the Action Committee.

Marion G. Bassett,
Canadian Member, CIE.

November 5, 1975.

Report of Activities of TC-2.2 Sources of UV- and IR- Radiation

This Technical Committee held one presessional meeting on 9 September 1975 at the Imperial College and one Technical Meeting on 16 September as part of the 18th General Session at London.

Most of the discussions dealt with the spectral distribution of daylight. It was realized that there are some discrepancies in the CIE recommendations issued by two different CIE Technical Committees (TC-1.3 Colorimetry and TC-2.2) especially in the UV part of the spectrum. More measurements and possibly also calculations are required. The mathematical model of the atmosphere developed by Braslau and Dave should be used in conjunction with the extraterrestrial values published by Thekaekara.

Short discussions on recommendations for standards of UV-radiation and its measurement were held. Also the standardization of radiation based on physiological efficacy functions was discussed.

According to a proposal by the Action Committee this Technical Committee will be disbanded and some of its functions will go to TC-1.2 Photometry and the newly created TC-3.7 on photobiological effects (former Study Group E).

The members drafted the following resolution "In view of the diverse and active interest in the accurate knowledge of the spectral distribution of solar and global radiation, it is recommended that the work of this committee in this field be continued. Special emphasis should be given to: (1) Absolute Irradiance Values, and (2) Requirements of other CIE committees (e.g., TC-3.7, TC-1.3 and SGF). It is recommended that the Secretariat of this committee be given to Canada (W. Budde) or South Africa (C.J. Kok)."

This resolution was forwarded to the Group Coordinator, Dr. B. Steck.

W. Budde

W. Budde

November 1975

Report of Activities of TC-2.3 Photometric and Radiometric Characteristics of Materials

The US TC-2.3 held one meeting in May 1975 at Washington which I attended. The activities of the various subcommittees were discussed and also the future of TC-2.3.

During the CIE General Session TC-2.3 held one Technical Meeting and a Postsessional Meeting. Some final editorial changes in the Technical Report on "Radiometric and Photometric Characteristics of Materials" were discussed and also the question whether the report should be published in all three official languages or only in one language. While the chairman was in favour of publication in three languages, it was pointed out that Technical Reports should be published only in one. The matter will be forwarded to the Action Committee for consideration.

This Technical Committee will most likely be assigned to the United States with F. Grum as proposed chairman.

W. Budde

W. Budde

November 1975

UNIVERSITY OF TORONTO
Department of Electrical Engineering
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ANNUAL REPORT 1974 - 1975

CIE COMMITTEE TC-2.4, LUMINAIRES

A pre-session meeting of this Committee was held on Sept.8th. in London, England to discuss a few outstanding matters relating to the work programme of the past four years. The document, "Recommendations of Photometry of Floodlights", was discussed again and agreement was reached on a number of contentious points. The revised document will now be submitted for publication. A second pre-session meeting was held on Sept. 9th. and two interesting papers were presented.

At the sessional meeting of the Committee several papers were presented and the work programme for the next four years was discussed. Mr. Frederiksen of Denmark announced that his term as chairman of the Committee was completed and that Mr. Massart of Belgium would be the new chairman.

Marion G. Bassett,
Canadian Member, CIE.

November 5, 1975.

November 4, 197

C.I.E. COMMITTEE TC-3.1

VISUAL PERFORMANCE

Two meetings of the committee were held during the year: (1) in June at the Institute for Perception, Soesterberg, The Netherlands: and (2) in September in London, England. I attended the Soesterberg meeting but not the London meeting.

Since Report No. 19 was issued several committee members from U.S.A., Italy, and Germany have conducted experiments and collected data at the request of the committee. These experiments were performed under conditions of dynamic seeing (ocular search, scanning etc) and involved motor responses or work-performance time. The experiments (which are still going on) have involved different groups of observers of varying ages so that data has been collected on individual differences between observers and group of observers.

A very large amount of new data is now available to the committee. Most of it is as yet unpublished and even incomplete.

The work of pulling the data of these several researchers together and attempting to express the data in mathematical terms and then expressing the mathematical work in graphical and tabular form has been done by.the chairman Blackwell.

The committee is planning on having a report (which will be supplementary to Report No. 19) ready by late 1976 or early 1977. The report is expected to be of great help to the application committee.

CIE TC-3.2 (Colour Rendering)

Report to CNC/CIE for 1974-75

A meeting of TC-3.2 was held on 6 September, 1975, preceding the 18th Session of the CIE. The following matters were discussed:

(i) Extension of the Colour Rendering Index to include assessment of the ultraviolet part of the spectrum. It is proposed to do this by adding three fluorescent test-colours but further work is needed to choose the best three.

(ii) Colour preference index. The committee has not yet decided on a definite proposal. There are differences in preference within and between countries and there is a danger of a confusing proliferation of different sets of reference preferred colours.

(iii) Colour rendering of light sources for colour reproduction. A subcommittee has begun to study this problem. I have resigned from this subcommittee because of the pressure of other work, but have been unable to find a replacement from Canada. The CBC is interested but no one there can spare the time to join the subcommittee.

(iv) Mr. Münch has resigned as chairman and the committee will be re-assigned to the United Kingdom with Miss M.B. Halstead as chairman.

I have invited the Committee to hold its next meeting in Ottawa in 1977.

A.R. Robertson
Canadian Member of CIE, TC-3.2

ARR/lls

G. Franklin Dean, P. Eng.
144 Wanless Avenue
Toronto, Canada M4N 1W2

November 7, 1975

CANADIAN NATIONAL COMMITTEE, C. I. E.

REPORT of TC- 4.1, INTERIOR LIGHTING

The most important event of the year was the announcement at the 18th Session in London that the Guide on Interior Lighting had been published and was available at the counter of the British I.E.S. for £2.00 per copy. The Guide is not a design document but deals with basic principles. The chapter on Discomfort Glare was the subject of the most controversy since there are four systems currently in use, viz., the Australian SAA Code System, the British I.E.S. Glare System the German(Söllner) Luminance Curve Method and our V.C.P. system. The final decision was to adopt an interim method based on the Söllner method which will be used until TC-34 devises an official C.I.E. system.

The lighting of mine interiors has been the responsibility of TC-4.1 but replies to a questionnaire indicated that only nine countries have much interest in the subject. Consequently, the decision was made to re-establish a Mine Lighting Committee, TC-4.10, with the secretariat in Poland which, along with Canada had expressed considerable interest.

The General Meeting held on September 11th in the Great Hall was for the Chairmen of the technical committees to give their progress reports. Mr. C. Dykes Brown, Chairman of TC-4.1 gave his report in two parts. The first part dealt with the development of the Guide on Interior Lighting. The second part gave reports from countries responding to a nine question questionnaire requesting details on lighting developments over the quadrennium.

At the meeting of TC-4.1 on Friday, September 12th, Dr. Blackwell presented his new Visual Performance concept with terms such as "Reference Illuminance", "Task Performance Probability", and Equivalent Reference Illuminance", ERI which is similar to ESI of our I.E.S.

Another meeting scheduled for TC-4.1 was changed to an open meeting on Energy Conservation. This meeting was well attended and involved much discussion.

Slides of Canadian interior lighting installations were shown on two occasions and were well received.

It was announced that Dr. D. Fischer of N. V. Philip, Eindhoven, the Netherlands would be the new Chairman of TC-4.1 replacing Mr. C. Dykes Brown.

G. F. Dean

Chairman, TC-4.1
CNC/CIE

Canadian National Committee
of the
Commission Internationale de l'Eclairage
T.C.-4.3 Stage and Studio Lighting

Annual Report, November 1975

The Canadian Sub-Committee has not carried out any projects during the past year.

There was no follow up of T.C.-4.3 projects during the year, and, thus, no formal action at the committee meeting in London on the morning of Sept. 17, 1975. The committee meeting and an informal discussion session in the afternoon resulted in the tabulation of a number of items needing international action and agreement to facilitate co-operation.

The Chairman of the committee expressed the hope "that the Action Committee of C.I.E. would find it possible to let the work of the Committee continue in some form, but this would necessitate a firm commitment from member countries to nominate people prepared to contribute actively to the work."

I recommend that C.N.C. should encourage continuing work in stage and studio lighting activities, thus benefiting Canadian Theatre and Television lighting practices. It is understood that this will require effort by Canadians in this field. I doubt if Canadian resources will permit us to take a strong leadership position involving organization etc. necessary to creation of an active committee.

C. William Shearer

C. William Shearer
Delegate T.C.-4.3

cc: K.R. Ackerman
R.G.S. Anderson
J.H. Kluge
D.R. Gillson

CANADIAN NATIONAL COMMITTEE OF CIE

CIE COMMITTEE TC4.4 SPORTS LIGHTING

ANNUAL REPORT TO CNC 1974
NATIONAL RESEARCH CENTRE

Ottawa, November 7, 1975

The 18th Session of CIE was held at Imperial College London, England, September 10 to September 18, 1975 with pre-Sessions and post-Sessions before and after these dates.

As I was on vacation I did not attend any pre-Sessions or post-Sessions but did attend all TC4.4, some TC4.5 and TC4.6 technical meetings when these parallel sessions were not conflicting.

TC4.4 committee met Thursday, September 11th at 3:00-5:00 p.m. in general assembly and specifically on September 15th at 2:00 p.m. to 5:00 p.m. in lecture theatre B, Room 342 Mechanical Engineering Department. Mr. A. Wald of Germany was Chairman during presentations of Papers #53 and #66. Both papers and their discussion were in German with no translation. I have a copy of Paper #66 in German.

--Summary

The comparison of two factor analyses of statements expressing pleasantness, disturbance of the seeing conditions by glare etc., which were used for subjective judgments of floodlighting of stadia in a model experiment and in real stadia showed that there are two different, uncorrelated factors for the judgment, the "pleasantness of the lighting" and the "feeling of disturbance by means of functional aptitude".

In the model experiment the expression of "Not feeling well in the stadium" correlates highly with the first factor, in real stadia with the second. This corresponds well with the importance of the task for seeing in both cases. The sensation of glare correlates in both cases with the first and the second factor.

It is suggested, to use both factors for the subjective judgments of lighting installations instead of one glare rating scale.--

No copy of Paper #53 was available.

Several formal discussions were presented:

1. Calculations of Symmetrical Floodlights (theory and practice).

2. Vector analysis of the above methods.

3. The ORTO (Olympic Radio and Television Organization) folder with photos and lists of Stadia was presented in a brief by myself with slides of the progress of construction (August 15, 1975) showing the Stadium and Veledrome partially constructed (this folder is here for your general review).

   Questions asked were, "would the Stadium and Veledrome be ready for July 1976, and is there many more strikes planned." My reply was that I could not answer either question, and no one in Montreal seems to be certain.

4. Future programs of TC4.4 Sportslighting -

   (a) Chairmanship may be changed to France.

   (b) Three reporters were appointed for C.I.E. for September 15th meeting - Mr. Vallat, Mr. Walters, Mr. Kessler.

   (c) Future plans are to continue study and preparation of drafts on the following:-

   1. T.C. Report 'Lighting for Ice Sports'
   2. T.C. Report 'Lighting for Sports Hall'
   3. T.C. Report 'Lighting for Tennis'
   4. T.C. Report 'Lighting for Swimming'
   5. T.C. Report 'Lighting for Football'.

   --- Drafts have not been received except for Swimming by Tom Lemons.

   (d) The 4th meeting of TC4.4 was in Zurich on April 28th & 29th.

   (e) The 5th meeting of TC4.4 will be on the 18th/19th May 1976 in London, England.

The sessions represented a new experience for me, but considerably more benefit would have resulted if translations or papers in English were provided.

S.W. McKnight
CNC/CIE
TC4.4 Sportslighting.

Subcommittee

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G.F. Dean
D.S. Gordon
A. Lafontaine
T. Nutt

COMMITTEE TC-4.6 - STREET LIGHTING

REPORT TO CNC/CIE

November 7, 1975

The committee on Street Lighting had a very active year in 1975. Four meetings of the main committee and numerous meetings of working groups were held.

The main committee meetings were held at the following locations:

1.	March 11-12	Milan
2.	June 17-18	Brussels
3.	Sept. 8	London
4.	Nove. 12-13	Copenhagen

I have attended the meetings in Milan and London.

The major achievement of this committee in the last Quadrennial is the completion of the revisions to CIE Document No. 12. The revised document will be known as Document No. 12/2 and will consist of the following:

A. Recommendations for the Lighting of Roads for Motorized Traffic.

i. TR-1 Calculation and Measurement of Luminance and Illuminance in Road Lighting.

ii. TR-2 Glare and Uniformity of Road Lighting.

iii. TR-3 Lighting of Special Areas.

iv. TR-4 Lighting System Maintenance and Depreciation.

v. TR-5 Classification of Luminaires and Performance Data.

Other areas of activities involved were - Tunnel Lighting, Vehicle Headlights and Traffic Safety.

It should be noted that some of the CIE proposed methods for calculation of lighting system and road classification are being considered for incorporation into RTAC Geometric Design Manual.

The TC-4.6 Committee is planning an active Quadrennial for 1975-79.

The new chairman of TC-4.6 is Alec Fisher of Australia, and the vice-chairman is Dr. M. Marsden of Great Britain.

A. Ketvirtis

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REPORT ON ACTIVITIES OF SG-D
COMPUTERS IN LIGHTING
OTTAWA NOV. 7, 1975

In the past 3 years I received many invitations to participate on various meetings of CIE Study Group for "Computers in Lighting".

I could not attend any one of them, but I had some correspondence and answered several questionnaires.

Regarding my activities I would like to mention two points:

1. By myself I am not a computer expert and I have no time to dedicate myself to such a study due to other commitments. From personal point of view this is putting me in an awkward situation, that I should live with it and yet I cannot enlarge my views or knowledge.

2. The present computer capability is by far superior than our clients ask for. All our computer print out sheets give the following: efficiency, max. to average luminance ratio and coefficient of utilization for various room ratios and reflectances.

   On top of this the computer has the following capabilities: luminance of all surfaces, average illumination for given conditions, equivalent sphere illumination, maintenance costs and schedules total layout for given conditions.

These data are never required by our clients. I am suspecting that this is due basically to ignorance or not sufficient information by all those who specify or use such data.

Usually the manufacturer is asked to provide computer data based on very limited order and any further expense to the manufacturer is prohibitive.

What is particularly surprising to me is that relatively large consulting firms totally disregard such capabilities. Considering total manhours and variety of data obtained, I feel that no expert in any consulting firm can beat the computer for price, time or amount of data.

I am wondering if this group can do something about or provide some suggestions to better inform Canadian industry and manufacturers.

Z. Subotich,
Study Group D
Computers in Lighting

ZS:so

CNC/CIE Study Group E,
"Non Sensory Effects of Optical Radiation"

Report by C.L. Sanders

The study group met in London and made the following decisions.

To recommend: A) Formation of a technical committee with the title "Actinic Effects of Optical Radiation".

B) Working Program

1. Prepare a comprehensive bibliography of optical radiation effects on humans and animals exclusive of vision.

2. Prepare at suitable intervals state of art reports on action spectra and dose relationship for each effect.

3. Develop a guide for measurement of radiation for the important specific effects.

4. Prepare guides for irradiation control practices for the human and animal environments based on the health and well being of inhabitants.

5. Maintain liaison with the International Commission on Photobiology (CIP) and other relevant international organizations.

6. Prepare a list of terms and definitions peculiar to this committee.

The working program was divided among those present in London. For the following subjects a short survey (5 pages, ready by March 1976) of the present situation regarding beneficial and detrimental effects, action spectra, minimal exposure and literature items. The 20 titles and the person responsible are as follows:

1) Vitamin D_3, metabolism, intestinal calcium absorption (Thorington).

2) Photosensitization - photoallergy (Thorington).

3) Respiratory Infection (Sokolov).

4) Stimulation; fatigue, relaxation, depression (Stone).

5) Light deprivation in maturation (Ronchi).

6) Erythema (Ruff).

7) Photoophthalmia, reddenning of eyes by light or eyestrain (Ruff).

8) Conjunctivitus, keratitus, cataracts (Steck).

9) Skin cancer; ageing (de Vos).

10) Retinal burn and photic damage (de Vos).

11) Bilirubin - phototherapy, damage to brain (Thorington).

12) Rhythms, endocrine effects (Ronchi).

13) Skin effects vs. pigmentation and thickening (Ruff).

14) Phototherapy, psoriasis, herpes, jaundice (Thorington).

15) Sexual development and function (Thorington).

16) Salivation (Thorington).

17) Ocular media inert pigmentation (D. Robertson, Australia).

18) Pupilliary response, action spectra (D. Robertson, Australia).

19) Animals: poultry (birds)
bacteria - viruses
pets - fish, dogs, cats, etc. (Poppe)
racing animals, horses, dogs (Nagy)
insect traps

20) Central nervous system and autonomic system (Stone).

National Research Council Canada
Conseil national de recherches Canada

Division of Physics
Division de physique

File Référence

January 22, 1976

To: Members of the Canadian National Committee of the CIE

(Information copy to other interested persons)

1. I enclose the following items:

(i) Minutes of the 20th Annual Meeting of the CNC/CIE, held on 7 November 1975.

(ii) For those who did not attend the meeting, copies of the following reports that were presented at the meeting:

Secretary's Report
Report by the Members of the CIE Executive Committee
Reports by delegates to CIE Technical Committees 1.2, 1.3, 1.5, 2.2, 2.3, 2.4, 3.1, 3.2, 4.1, 4.3, 4.4, and 4.6
Reports by delegates to CIE Study Groups D and E

If you attended the meeting, but did not receive a copy of any of these, please let me know.

(iii) Copies of the following reports that have been received since the meeting:

Reports by delegates to CIE Technical Committees 1.4 and 4.7
Reports by delegates to CIE Study Groups A and C

(iv) The latest membership and address lists of the CNC/CIE.

2. The Illuminating Engineering Society of Great Britain will hold its 1976 National Lighting Conference at the University of York, England, from 28 to 31 March 1976. I have further details for anyone who is interested.

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Annual Report
Technical Committee 1.4 Scotopic, Mesopic and Photopic Vision

The activities of this committee have centered about the preparation of a CIE technical report concerned with problems of the measurement of light as meaningful with regard to vision. A writing subcommittee met at the annual meeting of the Association for Research in Vision and Ophthalmology in Sarasota, Florida, April 1975. The third draft was presented at the meeting held during the CIE meetings in London, September 1975. Many suggestions were discussed and incorporated in a fourth draft. It was agreed at this meeting that after Dr. Kinney makes some further minor changes that this document would be sent to the various national chairmen of T.C. 1.4 to receive approval as a technical report. The document will then be forwarded to the Action Committee.

At the London meeting the T.C. 1.4 committee decided that additional data were required for luminous efficiency functions obtained by means of heterochromatic brightness matching, point source stimuli, and large field (10^{o}) of brightness matching.

Peter K. Kaiser.

Report of Activities of TC-4.7

Dr. Pinkney has given you a report on the technical activities of the TC-4.7 meetings. I was very impressed with his contributions to the meeting, in particular the amount of work in road testing and computer calculation follow-up in his headlight testing program.

Dr. Pinkney's work seems to be giving the European members ground work and computer calculations to which they have never had access. Computer use time in Europe is commonly available in seconds and minutes. It is, to my knowledge, seldom available in the quantity that has been available to Dr. Pinkey, and the National Research Council.

It follows then that Canada's present special contribution to TC-4.7 is enormous in comparison to the specialized contribution of any other country for some years. The committee was quite eager to have Dr. Pinkney continue this program to its conclusion. I could well believe he received considerable encouragement to do so after, as well as during, the meeting.

The intent, if I understand and state it correctly here, is for Dr. Pinkney to establish, eventually, a method of mathematically analysing the light from a headlamp. The result of this analysis would provide accurate data as to the lights effect on visibility in all conditions of driving weather and glare, as well as the physiological effects on the vehicle driver.

If I am correct this would be a major step towards the improvement of headlamp design and the speed at which it could be accomplished. At present, a great deal is left to observer testing and reporting. This has been reasonably accurate and successful, but very slow and subject to a great deal of interpretation. Canada's contribution in my opinion, when completed, would be a major accomplishment.

NOTE: This report was prepared from a letter written by Mr. G.L. Snider.

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Annual Report of Study Group A
Psychological Problems in Lighting

A meeting was held of this study group in Montreal in conjunction with the annual meeting of Applied Psychology. I was unable to attend this meeting, but was informed that it was the consensus of opinion that this study group be changed to a technical group.

At the London CIE meetings this feeling regarding the termination of Study Group A and the establishment of a Technical Committee was reaffirmed. However, the action committee decided to combine Study Group A with Technical Committee 3.5, Lighting and the Environment. The chairmanship of 3.5 will change to Dr. Flynn of the United States who previously was very active in the study group A activities.

Peter K. Kaiser.

CIE STUDY GROUP C

ANNUAL REPORT TO CNC/CIE

October, 1975

The Annual Report for Study Group C is not extensive. We have, however, been in correspondence with Dr. Svehla of Czechoslovakia, the Chairman of SG-C, in December 1974 and received his answer on February 4, 1975. Dr. Svehla realizes the implications and difficulties of collecting "private" information. However, the writer is expecting a statistical model as it was to be evolved at the September CIE General Conference. We shall endeavour to supply the requested information. Hopefully we will also receive a report of the London meeting of SG-C from Mr. D. MacGowan who attended the SG-C session on an informal basis.

Yours very truly,

ORCONS COMPANY LIMITED,

A. T. Orr, (Member SG-C)
President.

ATO/jl
Att.

January 1976

Canadian National Committee of CIE

President:	M.G. Bassett	TC-1.5
Vice-President:	W. Budde	TC-2.2, TC-2.3
Secretary:	A.R. Robertson	TC-1.3, TC-3.2
Executive Committee:	F.R. Dorward	TC-2.1, TC-4.10
	D.W. Frick	-
	P. Manning	TC-3.5
Members:	J.M. Chorlton	TC-3.1, TC-3.4
	B.N. Clarkson	TC-4.5, SG-F
	G.E. Davidson	TC-1.1
	G.F. Dean	TC-4.1
	D.S. Gordon	-
	D. Hoogeveen	TC-3.7
	P.K. Kaiser	TC-1.4
	A. Ketvirtis	TC-4.6
	S.W. McKnight	TC-4.4
	J.D. Moreland	TC-1.6
	G.E. Mulvey	TC-3.3
	A.T. Orr	TC-4.9
	H.F.L. Pinkney	-
	C.L. Sanders	TC-1.2
	C.W. Shearer	-
	G.L. Snider	TC-4.7
	D. Stephenson	TC-4.2
	Z.S. Subotich	TC-2.4
	J.C. Wilson	-
	G. Wyszecki	-

The CNC/CIE is not represented on TC-3.6 or TC-4.8

January 1976

CIE Technical Committees

Committee Number	Title	Country	Chairman	Canadian Member	NRC File No.
TC-1.1	Definitions & Vocabulary	France	Terrien	Davidson	1459-25-9
TC-1.2	Photometry & Radiometry	Canada	Sanders	Sanders	1459-25-5
TC-1.3	Colorimetry	Great Britain	Hunt	Robertson	1459-25-2
TC-1.4	Photopic, Mesopic & Scotopic Vision	USA	Kinney	Kaiser	1459-25-4
TC-1.5	Fundamentals of Lighting Calculations	France	Dourgnon	Bassett	1459-25-25
TC-1.6	Fundamentals of Visual Signalling	USA	Douglas	Moreland	1459-25-10
TC-2.1	Sources	Japan	Nakaji	Dorward	1459-25-19
TC-2.2	Detectors and Radiometric Instruments	Hungary	Schanda	Budde	1459-25-35
TC-2.3	Materials (Methods of Measuring Characteristics)	USA	Grum	Budde	1459-25-13
TC-2.4	Luminaires	Belgium	Massart	Subotich	1459-25-14
TC-3.1	Visual Performance	USA	Blackwell	Chorlton	1459-25-11
TC-3.2	Color Rendering	Great Britain	Halstead	Robertson	1459-25-3
TC-3.3	Fundamentals of Physical Environment	Netherlands	de Boer	Mulvey	3-3-I-103-25
TC-3.4	Discomfort Glare	Australia	Lowson	Chorlton	1459-25-24
TC-3.5	Lighting & the Environment	Great Britain	Hewitt	Manning	1459-25-15
TC-3.6	Lighting & Architecture	South Africa	Gow		
TC-3.7	Photobiological Effects	USA	Thorington	Hoogeveen	
TC-4.1	Interior Lighting	Netherlands	Fischer	Dean	1459-25-20
TC-4.2	Daylighting	Belgium	Dogniaux	Stephenson	1459-25-26
TC-4.4	Sports Lighting	Germany	Wald	McKnight	1459-25-22
TC-4.5	Exterior Lighting	Italy	Grandi	Clarkson	1459-25-21
TC-4.6	Street Lighting	Australia	Fisher	Ketvirtis	1459-25-17
TC-4.7	Automobile Lighting	Netherlands		Snider	1459-25-1
TC-4.8	Airborne Lighting & Signals	France	Heynemann		1459-25-18
TC-4.9	Cost-Benefit Relationships in Lighting	Czechoslovakia	Svehla	Orr	1459-25-36
TC-4.10	Mine Lighting	Poland	Peretiatkowicz	Dorward	1459-25-31
SG-F	Photochemical & Agricultural Applications	USSR		Clarkson	

January 1976

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1.3 Colorimetry

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1.4 Photopic, Mesopic and Scotopic Vision

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4.7 Automobile Lighting

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4.10 Mine Lighting

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