

PEOPLE

New Members.

The following have recently been admitted as members of the Society:

Bedford, C. Wellington
Burr, J. Wellington

EARTHQUAKE ENGINEERING RESEARCH SCHOLARSHIPS

The New Zealand National Society for Earthquake Engineering (NZNSEE) provides annual scholarships of up to \$4000 to suitably qualified persons to assist research activities related to earthquake engineering. Suitable research areas include most aspects of earthquakes and their effects. The total number of Scholarships awarded in any one year is at the discretion of the NZNSEE Management Committee. Applications are welcomed from individuals fulfilling the following criteria:

- Undertaking post-graduate research related to earthquake engineering that is consistent with the objectives of the NZNSEE;
- Enrolled at the time of application at a New Zealand university or, **in exceptional circumstances**, New Zealand citizens enrolled in post-graduate studies at foreign universities. Applicants from New Zealand universities do not require New Zealand citizenship and;
- A current member of the New Zealand National Society for Earthquake Engineering.

No application form is required. Applicants are requested to outline in detail the nature, purpose and probable outcomes of their proposed research. A detailed work plan and budget indicating the amount requested for the Earthquake Engineering research Scholarship, and other sources of financial support of the proposed research, is required. Applications must be accompanied by a confidential letter of support from a university staff member involved with the research project. A brief curriculum vitae will assist in selecting successful applicants.

Suitably qualified applicants will be awarded an Earthquake Engineering Research Scholarship under the following conditions:

- 1). The subject of study and the applicant are considered suitable by the Management Committee of the NZNSEE. All applications must be completed by the person who will undertake the research;
- 2). Only one Scholarship will be awarded to any applicant in any given financial year;
- 3). The Scholarship is awarded for twelve months. Multi-year applications will not be considered, but all applicants can reapply each year;

- 4). On completion of the research project, a research paper is presented that is suitable for publication in the *Bulletin of the New Zealand National Society for Earthquake Engineering*. It is normal practice to withhold part of the Scholarship until this condition is fulfilled.

31st January is the annual closing date for applications which should be sent to:

The Administrative Secretary,
 New Zealand National Society for Earthquake Engineering,
 P O Box 48-046,
 Silverstream,
Upper Hutt.

WORLD EARTHQUAKES OF MAGNITUDE 6.0 AND GREATER. September- December 2000.

Data from the U.S. National Information Service.

Date	Lat.	Long.	Depth (km)	Mag.	
SEP 01	1.458N	96.600E	33	6.0	Off W Coast Of Northern Sumatera.
SEP 02	19.846S	179.19W	684	6.0	Fiji Islands Region.
SEP 10	23.958N	121.436E	33	6.2	Taiwan. Damage to roads and power outages occurred in east-central Taiwan. Objects knocked from shelves at Taipei. Recorded (5 TAP) at Hua-lien and I-lan County; (4 TAP) in Tapei and Tao-yuan Counties; (3 TAP) at I-lan and in Hua-lien, Hsin-chu and Non-you Counties; (2 TAP) in much of central and northern Taiwan. Also recorded (1 JMA) on Yonaguni-jima, Ryukyu Islands.
SEP 10	1.116S	129.374E	33	6.1	Halmahera, Indonesia.
SEP 11	15.804S	173.733W	116	6.3	Tonga Islands. Felt at Apia, Samoa and on Nive.

- SEP 12 35.373N 99.343E 33 6.1 **Qinghai, China.**
Felt at Lanzhou and Xining.
- SEP 12 5.463S 101.850E 33 6.0 **Southwest Of Sumatera, Indonesia.**
Felt along the southwest coast of Sumatera.
- SEP 14 15.684S 179.782E 33 6.2 **Fiji Islands.**
- SEP 22 4.997S 102.185E 33 6.2 **Southern Sumatera, Indonesia.**
Felt in the Bengkulu area.
- SEP 26 17.204S 173.864W 33 6.4 **Tonga Islands.**
- SEP 28 0.167S 80.578W 33 6.4 **Near Coast Of Ecuador.**
Minor damage at Chone and Quito. Felt throughout Ecuador.
- OCT 02 7.999S 30.518E 10 6.5 **Lake Tanganyika Region.**
One person killed, several people injured in the Kipili-Sumbawanga area, Tanzania. Seven houses and one dispensary destroyed in the Nkasi District, Tanzania. About 150 houses damaged in the Rukwa region, Tanzania. Felt strongly in the epicentral area.
- OCT 03 40.290N 142.977E 33 6.0 **Near East Coast Of Honshu, Japan.**
Felt at Misawa. Recorded (3 JMA) in central eastern Aomori, northern Iwate and northeastern Miyagi Prefectures. Recorded (2 JMA) in much of northern Honshu. Also recorded (2 JMA) in the Shizunai and Tomakomai areas and (1 JMA) in many parts of southern Hokkaido.
- OCT 04 11.034N 62.570W 117 6.1 **Windward Islands.**
Minor damage (VI) in the Maracus Bay area, Trinidad. Seiche observed in swimming pool at Port-of-Spain, Trinidad. Felt strongly throughout Trinidad and Tobago. Felt in the southern Windward Islands; felt in northeastern Venezuela including Caracas. Also felt in northern Guyana.
- OCT 04 15.402S 166.863E 33 6.8 **Vanuatu Islands.**
- OCT 05 31.741N 40.975W 10 6.1 **Northern Mid-Atlantic Ridge.**
- OCT 05 6.739N 127.096E 33 5.9 **Philippine Islands Region.**
- OCT 06 35.389N 133.119E 10 6.7 **Western Honshu, Japan.**
At least 130 people injured, 200 houses severely damaged or destroyed and about 2,230 homes and other buildings damaged in the Tottori-Yonago-Sakaiminato area. Damage was also reported in other parts of Tottori Prefecture. Landslides occurred in the epicentral area, blocking many roads. Recorded (6U JMA) in Tottori; (5U JMA) in northern Okayama; (5L JMA) in northeastern Shimane and southern Hiroshima and Okayama; (4 JMA) in much of southwestern Honshu; (3 JMA) in other parts of southwestern Honshu; (2 JMA) as far north as Saitama and Toyama Prefectures. Recorded (5U JMA) in eastern Kagawa; (5L JMA) in Tokushima and western Kagawa; (4 JMA) in southern Tokushima and northern Ehime and Kochi; (3 JMA) in southern Ehime; (2 JMA) in other parts of Shikoku. Also recorded (3 JMA) in northern Kyushu and

			(2 JMA) in other parts of Kyushu.	NOV 087.052N 77.885W 17	6.5	Panama-Colombia Border Region. Two people slightly injured; 86 houses and some municipal buildings damaged in the Jurado area. Felt by people in high-rise buildings in Medellin and Cali. Minor cracks in some buildings at Boca de Cupe, Panama.
OCT 21	47.332S 12.348W	10	6.0 Southern Mid-Atlantic Ridge.			
OCT 21	1.842N 90.611W	10	6.0 Galapagos Islands.			
OCT 25	34.595S 109.567W	10	6.0 Southern East Pacific Rise.			
OCT 25	6.507S 105.604E	38	6.8 Sunda Strait, Indonesia. Some damage (V) at Pandeglang, (IV) at Jakarta and at Anyer, Jawa. Felt (IV) at Serang, Jawa. Felt at Bandung, Garut, Sukabumi, Tasikmalaya and in other parts of western Jawa. Also felt at Bandar Lampung, Sumatra and by people in high-rise buildings at Singapore.			
OCT 25	34.635S 109.490W	10	6.1 Southern East Pacific Rise.	NOV 1342.542N 144.758E	33	6.1 Hokkaido, Japan. Recorded (3 JMA) in the Bekkai, Kushiro, Taisetsu-San National Park areas. Recorded (2 JMA) in much of southeastern Hokkaido and (1 JMA) in parts of western and north-central Hokkaido. Also recorded (1 JMA) in Iwate, eastern Aomori and northern Miyagi Prefectures, Honshu.
OCT 27	26.277N 140.522E	387	6.1 Bonin Islands, Japan Region. Recorded (1 JMA) in Chiba, Fukushima, Ibaraki, Tochigi and eastern Saitama Prefectures, Honshu. Also recorded (1 JMA) in the Tokyo-Yokohama area, Honshu.	NOV 163.958S 152.268E	33	8.0 New Ireland Region, P.N.G. Local tsunami generated causing damage at Rabaul and Kokopo, New Britain. Felt strongly on much of northeastern New Britain and on southern New Ireland.
OCT 29	4.955S 154.010E	78	6.9 Solomon Islands.	NOV 165.179S 153.054E	33	7.6 New Ireland Region, P.N.G. Additional damage in the epicentral area.
OCT 30	9.807S 119.138E	33	6.0 Sumba Region, Indonesia. Felt (VI) at Waingapu.	NOV 175.453S 151.685E	33	7.5 New Britain Region, P.N.G.
OCT 31	17.886S 175.303W	33	6.1 Tonga Islands.	NOV 185.092S 153.049E	33	6.7 New Ireland Region, P.N.G.
NOV 01	45.053S 167.119E	33	6.1 South Island, New Zealand. Felt strongly in the Te Anau area. Also felt at Dunedin and at Invercargill.	NOV 185.138S 151.731E	33	6.8 New Britain Region, P.N.G.
NOV 06	56.304N 153.348W	33	6.0 Kodiak Island Region, Alaska.	NOV 185.402S 153.490E	33	6.0 New Ireland Region, P.N.G.
NOV 07	55.176S 28.736W	33	6.8 South Sandwich Islands Region.	NOV 195.118S 151.648E	54	6.0 New Britain Region, P.N.G.

NOV 195.657S	151.763E	33	6.1	New Britain Region, P.N.G.	Fairbanks, Healy, North Pole, Palmer, Salcha and other parts of central Alaska.
NOV 194.794S	153.164E	33	6.0	New Ireland Region, P.N.G.	
NOV 215.320S	152.122E	33	6.2	New Britain Region, P.N.G.	DEC 04 14.906N 93.898W 33 6.0 Near Coast Of Chiapas, Mexico.
NOV 214.935S	152.764E	33	6.2	New Britain Region, P.N.G.	DEC 06 39.625N 54.772E 30 7.5 Turkmenistan. At least 11 people reported killed, several injured and damage in the Nebitdag-Turkmenbashi area. Felt in much of Turkmenistan; southern Russia including Moscow. Also felt in northern Iran, Baki, Azerbaijan; Spitak, Armenia.
NOV 234.602S	153.077E	33	6.3	New Ireland Region, P.N.G.	
NOV 2540.332N	49.958E	10	6.3	Eastern Caucasus. Felt strongly in the epicentral area.	
NOV 2540.108N	49.959E	10	6.3	Eastern Caucasus. At least 26 people killed (3 from earthquake, 21 from heart attacks and 2 on November 26 from a natural gas explosion which resulted from a damaged valve from the main shock.) and more than 300 people in the Baku area. Some damage and utilities disrupted in the Baku area. The earthquake was felt over a wide area including Makhachkala, Russia, Tbilisi, Georgia and Northern Iran. This was preceded by an event at 1809 UTC.	DEC 06 4.184S 152.771E 31 6.6 New Britain Region, P.N.G.
NOV 2924.504S	70.549W	58	6.3	Near Coast Of Northern Chile. Minor damage (V) to tall buildings at Taltal. Felt (V) at Camar, Peine, Socaire and Talabre; (IV) at Antofagasta, Chanaral, Copiapo and Sierra Gorda; (III) in the Calama-El Salvador-Tocopilla area; (II) in the Vallenar area.	DEC 12 6.020N 82.682W 10 6.1 South Of Panama.
NOV 2963.900N	150.330W	10	6.0	Central Alaska. Minor damage at Anderson and Clear. Felt at Cantwell, Clear, Denali National Park, Eielson AFB,	DEC 15 38.608N 31.058E 10 6.1 Turkey. At least six people killed, 41 injured and damage in the Afyon-Bolvadin area. Felt strongly in the epicentral area.
					DEC 18 21.107S 179.072W 600 6.6 Fiji Islands Region.
					DEC 19 11.782N 144.760E 33 6.3 South Of Mariana Islands. Felt throughout Guam. Maximum intensity MM IV.
					DEC 20 39.061S 74.425W 33 6.4 Coast Of Central Chile. Felt (V) at Osorno; (IV) at Ancud, Melipeuco, Puerto Montt, Puerto Varas, Temuco and Valdivia; (III) at Carahue and Villarrica; (II) at Chiloe and Los Angeles.
					DEC 20 9.231S 154.328E 33 6.6 D'entrecasteaux Islands Region.
					DEC 21 5.740S 151.126E 33 6.5 New Britain Region.
					DEC 21 5.298S 154.031E 386 6.0 Solomon Islands.
					DEC 22 44.833N 147.157E 137 6.2 Kuril Islands.

				Felt on Hokkaido and Honshu. Recorded (4 JMA) in the Bekkai area; (3 JMA) in the Hiroo, Kushiro, Nemuro and Monbetsu-Urakawa areas; (2 JMA) in much of eastern Hokkaido; (1 JMA) in southwestern Hokkaido. Recorded (3 JMA) at Aomori and in northern Iwate and central Miyagi; (2 JMA) at Aomori, central Fukushima, western Iwate and other parts of Miyagi Prefectures, Honshu. Also recorded (1 JMA) from Aomori to Kanagawa Prefecture, Honshu.	SEP 20	41.03S	173.51E	93	4.0	32 km north-east of Nelson. Felt at Nelson and Blenheim.	
					SEP 22	47.67S	165.02E	33	5.0	124 km west-north-west of Snares Island.	
					SEP 24	39.40S	175.64E	100	5.6	20 km east of Ohakune. Felt central North Island to Wellington.	
					SEP 25	37.54S	177.11E	5	4.8	7 km west-south-west of White Island. Felt Tauranga.	
					SEP 28	38.84S	177.97E	39	4.3	20 km south of Gisborne. Felt Gisborne.	
					SEP 28	40.96S	175.16E	26	3.5	12 km south-east of Waikanae. Felt Raumati South.	
DEC 23	7.901S	135.801E	61	6.0	Aru Islands Region, Indonesia.	OCT 01	41.56S	174.37E	12	4.7	36 km east of Blenheim. Felt from Kapiti Coast to Blenheim.
DEC 28	4.037S	152.378E	33	6.2	New Britain Region.	OCT 02	41.18S	175.06E	19	3.6	7 km south of Upper Hutt. Felt in the Wellington area.
SIGNIFICANT NEW ZEALAND EARTHQUAKES. September - December 2000											
Date	Lat.	Long.	Depth (km)	Mag.							
SEP 05	45.23S	167.29E	59	4.1	39 km west-north-west of Te Anau. Felt Manapouri.	OCT 02	43.20S	171.05E	5	4.2	54 km south of Hokitika.
SEP 06	37.25S	177.20E	5	4.8	29 km north of White Island.	OCT 03	43.19S	171.08E	5	4.5	53 km south of Hokitika.
SEP 07	38.82S	177.43E	30	4.5	25 km north of Wairoa. Felt at Tuai.	OCT 07	39.88S	175.27E	30	4.1	20 km east-north-east of Wanganui. Felt from Wanganui to Feilding.
SEP 08	39.14S	178.70E	33	4.0	79 km south-east of Gisborne.	OCT 10	41.15S	174.60E	32	3.8	19 km west of Porirua. Felt in Lower Hutt.
SEP 10	40.21S	176.09E	56	4.4	Close to Dannevirke. Felt at Waipawa.	OCT 12	46.43S	169.24E	15	4.4	27 km south-south-west of Clinton. Felt in eastern Southland.
SEP 12	41.19S	174.64E	38	3.6	15 km north-west of Wellington. Felt at Wellington.	OCT 13	37.58S	175.80E	5	4.0	21 km south of Waihi. Felt in the Tauranga district.
SEP 16	44.62S	167.73E	32	4.5	17 km west-north-west of Milford Sound.	OCT 13	42.00S	174.05E	12	4.4	38 km south of Seddon.