

ium, to the chagrin of industrial interests. A second report on the economic need for the pipeline is awaited from the Canadian National Energy Board, which regulates the oil and gas industries and is still holding hearings.

USSR action on seminar

Professor Mark Azbel has been ordered by the Soviet authorities to cease holding the 'Sunday Seminars' for refusenik scientists. The seminars have been held regularly for five years, and only a month ago Professor Azbel was given a once-off permission to hold a special anniversary session—the first time that the authorities openly acknowledged the existence of the seminars.

Within the past three weeks, Pro-

fessor Azbel has been summoned three times to the Lubyanka and Lefortovo prisons for interrogation. He was obliged to sign an undertaking not to reveal the contents of the investigation. It is known, however, that it related to his association with Anatolii Shcharanskii, the unofficial 'press-agent' of the seminar group at present held for investigation for alleged contact with the CIA.

Last week Dr Viktor Brailovskii and Dr Veniamin Fain, who are among the senior members of the group, were also called in for interrogation.

The most recent message received from Professor Azbel was that the authorities are striking at the 'Professorate'. Previous action against refusenik scientists has been aimed at the lower echelons.

NPL's new director

Dr Paul Dean is to take over as director of the National Physical Laboratory (NPL) on 1 October. He will succeed Sir Iuean Maddock, who has been acting director since giving up his appointment as chief scientist at the Department of Industry at the end of last March. Dr John Dunworth, the previous permanent director, retired last June; he joined the NPL as deputy director in 1962 and became responsible for the laboratory in 1964. Dean joined the laboratory in 1957, and will be moving from the Department of Industry's headquarters, where he was head of the Space and Air Research division. He was also Head of the Research and Development Contractors division.

THEY came in busloads from as far away as Minnesota. They wore pro-laetrile buttons. They were prepared to pack the hearing room, to applaud wildly at the inflammatory oratory of their leaders, and to boo, hiss and interrupt when members of the 'medical establishment' warned them of the uselessness of laetrile in cancer therapy.

The occasion was the Food and Drug Administration (FDA) Administrative Rulemaking Hearing on Laetrile, held in Kansas City, Missouri at the beginning of May. To 'bend over backwards', the FDA had talks by the laetrile crusaders, following opening remarks by the presiding officer. My experience with hearings led me to know that the television cameras and reporters would be present at the morning session, and they would depart at noon, leaving the opponents of laetrile without media coverage, just as the opponents of banning DDT were treated in 1969.

Efforts at appeasement always fail. At 8 am on the first day the laetrile pushers called a press conference that was largely devoted to rhetoric against the FDA and allegations that the hearings were a "kangaroo court". I asked if the laetrile supporters had been given the opportunity to speak at the hearings. The answer was, necessarily, "yes", but a woman hastened to my side and hissed in my ear that if I interrupted their press conference with any more questions, she would call the hotel manager and have me removed forcibly from the room. I managed to avoid this fate when I asked my next question, by alleging that I was a reporter for *Nature*. I requested any scientific literature reference, even one, to substantiate the claim that laetrile is

vitamin B17. I was told "wait until tomorrow".

During the hearings, professors of medicine were jeered at and heckled. Advocates of laetrile, shouting and declaiming in the manner of a

Quackery triumph



THOMAS H. JUKES

religious revival meeting, were wildly applauded as they testified to their "cures". The audience was ecstatic, as well it might be. Bills to legalise laetrile without even defining what laetrile actually is, have just been passed by the legislatures of Alaska, Florida, Indiana and Nevada. The Indiana Bill had successfully overridden the Governor's veto. The Nevada bill includes a 10% cut on laetrile sale for the State Treasury.

The publication of the laetrile pushers, *The Choice*, was bursting with exultant information. It contained advertisements for "Reverend Clifford Oden's stirring call to faith in God and vitamin B17", for a new

water distiller that would remove fluoride from drinking water, and for a book on "chelation therapy in the killer diseases". The publication informed its readers that "efforts to decriminalise laetrile use in Texas surged into the forefront where 150 members of the lower house shouted their approval of the freedom of choice bill and stood up and cheered after the unanimous vote was delivered". One of the photographs showed two 'Wisconsin committee leaders' carrying "23,000 names on signatures" in support of pro-laetrile bills introduced into the Wisconsin legislature; another was of Gloria Swanson telling her health philosophy and her personal victory over a tumour.

The pro-laetrile campaign is administering a crushing defeat to science and rationality. Undoubtedly it is well-financed. A Californian 'laetrile physician' was indicted on charges including one of depositing \$2,500,000 in California banks, May 1973 to August 1975. His licence was revoked for "gross negligence and incompetence", 29 November, 1976.

The technique for arousing support is an appeal to revolt against authority, bureaucracy and the 'medical establishment'. Political action is effected by writing letters to legislators. This procedure was overwhelmingly successful with the Proxmire Bill in the US Senate 1975, specifically directed against the authority of the FDA.

Things fall apart; the centre cannot hold;
Mere anarchy is loosed upon the world,
The blood-dimmed tide is loosed, and
everywhere

The ceremony of innocence is doomed;
The best lack all conviction, while the
worst

Are full of passionate intensity.

W. B. Yeats