## Vatican using US-Soviet science team

# Pope plans to ng inuclear ter' aları

By Our FOREIGN STAFF.

THE POPE is expected to send a team of Soviet and US scientists around the world's most important, capitals on a, special Vatican mission to expose the dangers of a "nuclear

winter."

In a devastating report leaked in Rome yesterday, the scientists told Pope John Paul that nuclear war could lead to the virtual elimination of all life across the entire land surface of the earth. The 18 scentists involved met for three days last month in the Vatican under the auspices of the Pontifical Academy of Sciences to discuss the possibility of a "nuclear winter."

Among them was Yevgeny Velikov, the vice-president of the Soviet Academy of Sciences, and Carl Sagan, the US research worker who first publicised the theory of the nuclear winter.

He warned that long term consequences of a nuclear war on the earth's weather could be worse than the immediate effects of the blasts and radiation.

### INJECT DUST ..

The Vatican reports said weapons exploded near the ground would inject huge amounts of dust into the atmosphere, joined by sooty smoke from many ground fires.

"The clouds of fine particles would soon spread throughout the northern hemisphere, absorbing and scattering sunlight and thus darkening and cooling the earth's surface.
"Continental temperatures could fall rapidly well below freezing for months, even in summertime creating a nuclear winter." This would it said.

happen even with wide variations in the nature of war." it said.
The dust clouds could nearly

The dust clouds could nearly wipe out photosynthesis — the part light plays in the manu-facture of green matter — devastate agriculture and cause widespread famine even in nations not directly involved in a nuclear conflict.

"Calculations show that the dust and smoke may well spread to the tropics and to much of the southern hemisphere. Thus non-combatant nations, including those far from the conflict, could be severely afflicted," the report said.

### DISASTER

"Such nations as India, Brazil, Nigeria and Indonesia could be struck by unparalleled disaster, without a single bomb exploding on their territories," it said.

it said.

Nuclear winter would mean widespread human suffering, with a large proportion of those who survive the immediate consequences of blasts dying from freezing, starvation and disease.

The report also said the climatic changes caused by nuclear war could have devastating effects on plant and animal life.

"The extinction of many lent and paint and property and species can be

animal life.

"The extinction of many plant and animal species can be expected, and, in extreme cases, the extinction of most non-oceanic species might occur," the report said.

could thus "Nuclear war on earth, and inight therefore imperil the future of humans, on earth, and inight therefore imperil the future of humanity,"

# danger cientists

broken, they said.

This, the speakers emphasised, would be in addition to the massive devastation caused by nuclear bombing. They estimate that perhaps thousands of milions of human beings could die of the consequences of these two factors.

A further hazard pointed to was the damage that would be done to the ozone layer above the earth by nuclear explosions, which could lead to a significant rise in damaging ultra yolet light on the earth's sur-

The Doomsday threshold of 500 nuclear war heads which is enough to disrupt the climate, is continually being exceeded by world.

Millions of tons of dust and smoke hurled into the atmosphere would blot out sunlight for months and perhaps years. Inland temperatures would fall to up to 40 degrees below freezing point. Large parts of the world would be no brighter than a moonlit night. Plant life on land and sea, deprived of light, would die, as

cival, biologist Dr. Irene Ridge and the dean of the science faculty of the Open University Prof. Mike Pentz, aided by videos, spelt out the dangers of making all humankind and all living oreatures on the planet extinct.

They bointed out that a nuclear exchange, using 1 per cent of the existing stock of warheads, held by the super powers, would cause far-reach-

Organised jointly by Sheffield City Council and SANA (Scientists Against Nuclear Arms), it was attended by 398 people.
Twenty-four local authorities were represented, as well as a large number of doctors, scientists, trade unionists, peace activists, Greenham peace women, youth organisations, Mps and councillors. THE FRIGHTENING prospects of a nuclear winter, which could extinguish all life from the planet if a nuclear war took place, were spelt out at a conference in Sheffield at the weekend.

# Pentagon admits danger of 'nuclear winter'

By Our FOREIGN STAFF

has ad· PENTAGON nitted that a nuclear war vould create a "nuclear winter" nd conceded that even "small suclear exchanges" could trigger

The concept of a prolonged reze-up, around the world, viping fout all life on earth, lirectly contradicts earlier leagant administration claims hat a findlear war could be winnable. Richard Wagner, assistant for

atomic weapons policy to Defence Secretary Caspar Weinberger, made his admission at a meeting of the joint economic committee of the two Houses of

committee of the two Houses of Congress.

The nuclear winter theory had to be taken "very seriously." Government studies had been underway for several months to determine the potential aftermath of nuclear war.

In MOSCOW the Communist Party daily Pravda said that the Soviet side would only agree to talks this autumn on a space weapons ban if a clear and

definite agenda was fixed before-

The US response to the Soviet proposal for such a meeting, the paper said, had been negative. The Soviet Union had offered talks on space and the Reagan administration said it would send a delegation to discuss nuclear weapons.

In AMSTERDAM, the municipal council has passed a resolution forbidding ships carrying nuclear weapons from entering the city's port. The move came after a visit by the Royal Navy's carrier Illustrious. The US response to the Soviet